INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Frank O'Bannon
Governor

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Commissioner

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.in.gov/idem

August 28, 2003

TO: Interested Parties / Applicant

RE: Indiana Ductile, LLC / T057-13975-00002

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval – Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204.

For an **initial Title V Operating Permit**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **thirty (30)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(b).
For a **Title V Operating Permit renewal**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **fifteen (15)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(a).

The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:
(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:
(1) the name and address of the person making the request;
(2) the interest of the person making the request;
(3) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for considerations at any hearing; and

(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of an initial Title V operating permit, permit renewal, or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impractible to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency
401 M Street
Washington, D.C. 20406

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNTVOP.dot 8/22/03

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(800) 451-6027
www.state.in.us/idem

PART 70 OPERATING PERMIT
OFFICE OF AIR QUALITY

Indiana Ductile, LLC
1600 South 8th Street
Noblesville, Indiana 46060

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T057-13975-00002	
Issued by: Original Signed by Janet McCabe Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: August 28, 2003 Expiration Date: August 28, 2008

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary ductile iron foundry.

Responsible Official:	President, Indiana Ductile, LLC
Source Location:	1600 South 8th Street, Noblesville, Indiana 46060
Mailing Address:	1600 South 8th Street, Noblesville, Indiana 46060
Source Phone Number:	(317) 773-3313
SIC Code:	3321
County Location:	Hamilton
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD Rules; Minor Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

(a) One (1) scrap and charge handling and heating operation, identified as EU-2, constructed in 1998, with a maximum capacity of 10.2 tons per hour, with emissions uncontrolled, and exhausting to the general area ventilation which exhausts to stack 001;

(b) One (1) electric induction furnace, identified as EU-3A, constructed in 1998, with a maximum capacity of 10.2 tons per hour, with emissions uncontrolled, and exhausting to the general area ventilation which exhausts to stack 001;

(c) One (1) magnesium treatment/inoculation operation, identified as EU-6, constructed in 1971, with a maximum capacity of 10.2 tons per hour, with emissions uncontrolled, and exhausting to the general area ventilation which exhausts to stack 001;

(d) Three (3) pouring/casting machines, identified as EU-7 and EU-8, both constructed in 1997, with emissions controlled by wet collector WC-E, exhausting to stack 004, and EU-9, constructed in 1997, with emissions controlled by wet collector WC-W, exhausting to stack 003, each with a maximum capacity of 3.4 tons of metal and 39 tons of sand per hour;

(e) Three (3) casting/cooling lines, identified as EU-7A, EU-8A, and EU-9A, constructed in 1997, each with a maximum capacity of 3.4 tons of metal and 39 tons of sand per hour, with emissions controlled by wet collector WC-E, and exhausting to stack 004;

(f) Three (3) shake-out units, identified as EU-11, EU-12, and EU-13, all constructed in 1997, each with a maximum capacity of 3.4 tons of metal and 39 tons of sand per hour, with emissions controlled by wet collector WC-E, and exhausting through stack 004;

(g) Sand grinding and handling operations, with a maximum capacity of 50 tons per hour of sand and 10.2 tons per hour of castings, consisting of the following equipment:

(1) One (1) vibrating casting conveyor, identified as EU-16, constructed in 1996, with emissions controlled by wet collector WC-E, and exhausting to stack 004;

(2) One (1) muller, identified as EU-17, constructed in 1971, with emissions controlled by wet collector WC-W, and exhausting to stack 003;

(3) Return sand screens, identified as EU-18, constructed in 1971, with emissions controlled by wet collector WC-W, and exhausting to stack 003;

(4) One (1) return sand conveyor system, identified as EU-27, constructed in 1971, with emissions controlled by wet collector WC-W, and exhausting to stack 003;

And the following storage bins:

(5) Two (2) return sand storage bins, identified as EU-19 and EU-20, both constructed in 1971, with capacities of 80 and 100 tons, respectively, emissions controlled by wet collector WC-W, and exhausting to stack 003;

(6) One (1) bond storage bin, identified as EU-22, constructed in 1978, with a capacity of 80 tons of premixed casting sand binder, emissions controlled by baghouse BH-2, and exhausting to stack 007;

(7) One (1) bond storage bin, identified as EU-23, constructed in 1971, with a capacity of 1 ton of premixed casting sand binder, emissions controlled by wet collector WC-W, and exhausting to stack 003;

(8) Two (2) outdoor sand storage bins, identified as EU-24 and EU-25, both constructed in 1971, each with a capacity of 150 tons, and sources of fugitive emissions;

(9) One (1) sand storage bin, identified as EU-26, constructed in 1971, with a capacity of 1 ton, emissions controlled by wet collector WC-W, and exhausting to stack 003;

(h) Core manufacturing operations with a maximum production rate of 0.84 tons per hour of manufactured cores, with emissions uncontrolled, consisting of the following equipment:

(1) Four (4) shell core machines, identified as EU-28, constructed in 1964, each with maximum capacity of 50 lb VOC/ton from catalyst use and 1.3 lb VOC/ton from binder use, a heat input capacity of 2.09 MMBtu/hr per machine, and exhausting to the general area ventilation which exhausts to stack 001;

(2) Two (2) isocure core machines, identified as EU-29, constructed in 1976 and 1997, respectively, each with maximum capacity of 30 lb VOC/ton from catalyst use and 1.1 lb VOC/ton from binder use, and exhausting to the general area ventilation which exhausts to stack 001;

(i) Tumbleblast cleaning operations, with a maximum capacity of 5.6 tons per hour of castings and 15 tons per hour of steel shot, consisting of the following equipment:

(1) One (1) shot blast machine, identified as EU-30, constructed in 1963, emissions controlled by baghouse BH-1, and exhausting to stack 006;

(2) One (1) shot blast machine, identified as EU-31, constructed in 1992, emissions controlled by baghouse BH-1, and exhausting to stack 006;

(j) Casting, grinding and finishing operations with a maximum throughput of 5.6 tons per hour of finished castings, consisting of the following equipment:

(1) Ten (10) grinding units, identified as EU-32, constructed in 1965, emissions controlled by baghouse BH-1, and exhausting to stack 006;

(2) Ten (10) finishing (air burr) units, identified as EU-33, all constructed in 1992, emissions controlled by baghouse BH-1, and exhausting to stack 006.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

(a) Propane-fired combustion sources with heat input equal to or less than six million (6,000,000) Btu per hour [326 IAC 2-2]:

(1) Two (2) 0.5 MMBtu/hr heating ladle torches;

(2) One (1) 0.5 MMBtu/hr core drying conveyor heating torch;

(3) Two (2) 0.5 MMBtu/hr auto pour torches.

(b) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment cutting torches, soldering equipment, and welding equipment. [40 CFR 52 Subpart P][326 IAC 6-3-2]

(c) Structural steel and bridge fabrication activities: using 80 tons or less of welding consumables and cutting 200,000 linear feet or less of one inch plate or equivalent. [40 CFR 52 Subpart P][326 IAC 6-3-2]

(d) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.3 Enforceability [326 IAC 2-7-7]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.4 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.5 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort or any exclusive privilege.

B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

(a) As provided in 326 IAC 2-7-5(6), the Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:

(1) Enforcement action;

(2) Permit termination, revocation and reissuance, or modification; or

(3) Denial of a permit renewal application.

(b) Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act.

(c) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(d) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

B.9 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.

(c) A responsible official is defined at 326 IAC 2-7-1(34).

B.10 Annual Compliance Certification [326 IAC 2-7-6(5)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1st of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and

(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.11 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within thirty (30) days after issuance of this permit, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) To the extent the Permittee is required by 40 CFR 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the requirements of 326 IAC 1-6-3 for that unit.

B.12 Emergency Provisions [326 IAC 2-7-16]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(9) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(h) Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.13 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

(b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

(c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

(d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;

(2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and

(4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

(e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).

(f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]

(g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.14 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either

(1) incorporated as originally stated,

(2) revised, or

(3) deleted

by this permit.

(b) All previous registrations and permits are superseded by this permit.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

(c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.17 Permit Renewal [326 IAC 2-7-4]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

(b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]

(1) A timely renewal application is one that is:

(A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(2) If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

(c) Right to Operate After Application for Renewal [326 IAC 2-7-3]

If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ, , takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, , any additional information identified as being needed to process the application.

(d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]
If IDEM, OAQ, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.18 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

(d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2

B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]

(a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

(b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.20 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;

(3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-7-20(b)(1), (c)(1), and (e)(2).

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).

(d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

B.21 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.

B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

(a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.

(b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, I/M & Billing Section), to determine the appropriate permit fee.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [40 CFR 52 Subpart P][326 IAC 6-3-2]

(a) Pursuant to 40 CFR 52 Subpart P, particulate matter emissions from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

(b) Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour. This condition is not federally enforceable.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326

IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.9 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within thirty (30) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within thirty (30) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality

100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial thirty (30) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.13 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

(a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

(b) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

(a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within ninety (90) days after the date of issuance of this permit.

The ERP does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.

(d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

(e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

(f) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance as defined in 40 CFR 68 is present at a source in more than a threshold quantity, the source must comply with the applicable requirements of 40 CFR 68.

C.16 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:

(1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.

(2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

(1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or

(2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.

(3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.

(4) Failure to take reasonable response steps shall be considered a deviation from the permit.

(c) The Permittee is not required to take any further response steps for any of the following reasons:

(1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.

(3) An automatic measurement was taken when the process was not operating.

(4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.

(d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.

(e) The Permittee shall record all instances when, in accordance with Section D, response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

(f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]

(a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1st of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:

(1) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);

(2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1 (32) ("Regulated pollutant which is used only for purposes of Section 19 of this rule") from the source, for purposes of Part 70 fee assessment.

(b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

C.19 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

(a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping

receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

Stratospheric Ozone Protection

C.21 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

(a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

(b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: units exhausting to stack 001 and combustion sources

(a) One (1) scrap and charge handling and heating operation, identified as EU-2, constructed in 1998, with a maximum capacity of 10.2 tons per hour, with emissions uncontrolled, and exhausting to the general area ventilation which exhausts to stack 001;

(b) One (1) electric induction furnace, identified as EU-3A, constructed in 1998, with a maximum capacity of 10.2 tons per hour, with emissions uncontrolled, and exhausting to the general area ventilation which exhausts to stack 001;

(c) One (1) magnesium treatment/inoculation operation, identified as EU-6, constructed in 1971, with a maximum capacity of 10.2 tons per hour, with emissions uncontrolled, and exhausting to the general area ventilation which exhausts to stack 001;

(h) Core manufacturing operations with a maximum production rate of 0.84 tons per hour of manufactured cores, with emissions uncontrolled, consisting of the following equipment:

(1) Four (4) shell core machines, identified as EU-28, constructed in 1964, each with maximum capacity of 50 lb VOC/ton from catalyst use and 1.3 lb VOC/ton from binder use, a heat input capacity of 2.09 MMBtu/hr per machine, and exhausting to the general area ventilation which exhausts to stack 001;

(2) Two (2) isocure core machines, identified as EU-29, constructed in 1976 and 1997, respectively, each with maximum capacity of 30 lb VOC/ton from catalyst use and 1.1 lb VOC/ton from binder use, and exhausting to the general area ventilation which exhausts to stack 001;

And the following Specifically Regulated Insignificant Activities

(a) Propane-fired combustion sources with heat input equal to or less than six million (6,000,000) Btu per hour [326 IAC 2-2]:

(1) Two (2) 0.5 MMBtu/hr heating ladle torches;

(2) One (1) 0.5 MMBtu/hr core drying conveyor heating torch;

(3) Two (2) 0.5 MMBtu/hr auto pour torches.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Production Limitation [326 IAC 2-2] [326 IAC 8-1-6]

(a) Pursuant to SSM 057-10672-00002, issued October 20, 1999, the steel scrap and ductile iron re-melt delivered to the electric induction furnace (EU-3A) and its associated operations [scrap and charge handling and heating, inoculation, pouring/casting (Section D.2), casting/cooling (Section D.2), shakeout (Section D.2), sand grinding and handling (Section D.2), tumbleblast cleaning (Section D.3), casting grinding and finishing (Section D.3), and core manufacturing] shall not exceed 27,900 tons per twelve consecutive month period with compliance determined at the end of each month.

(b) The total amount of propane used at the source shall not exceed forty-five (45.0) million standard cubic feet (MMSCF) per twelve consecutive month period with compliance determined at the end of each month.

(c) The PM and PM10 emission limits for stack 001, are as follows:

Stack (#): Process/facility (ID)	PM (lb/ton metal)	PM_{10} (lb/ton metal)
Stack 001: Scrap and Charge Handling and Heating (EU-2); Electric Induction Furnace (EU-3A); Magnesium Treatment/ Inoculation (EU-6); Core Manufacturing and Handling (EU-28 and EU-29)	2.05	1.72

Compliance with these limits, in conjunction with Conditions D.2.1(a) and D.3.1(a) [identical to Condition D.1.1(a)], is equivalent to total PM and PM10 emissions (from the entire source) of less than 146.8 and 63.4 tons per year, respectively. Compliance with these limits, and the emissions credits (from the removal of cupola EU-1) of 122 and 97.4 tons per year PM and PM10, respectively, will render the requirements of 326 IAC 2-2 not applicable to the modification permitted via SSM 057-10672-00002, issued October 20, 1999.

(d) The total amount of VOC in the binder and catalyst used by the core manufacturing operations (EU-28 and EU-29) shall not exceed 6.1 tons per twelve consecutive month period with compliance determined at the end of each month.

Compliance with this limit, in conjunction with Conditions D.1.1(a) and D.2.1(c), is equivalent to total VOC emissions (from the entire source) of less than 25.0 tons per year. Compliance with this limit will render the requirements of 326 IAC 8-1-6 (BACT) and 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to the modification permitted via SSM 057-10672-00002, issued October 20, 1999.

D.1.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from:

(a) The one (1) scrap and charge handling and heating operation, identified as EU-2, shall not exceed 19.4 pounds per hour when operating at a process weight rate of 10.2 tons per hour.

(b) The one (1) 10.2 ton per hour electric induction furnace, identified as EU-3A, shall not exceed 19.4 pounds per hour, when operating at a process weight rate of 10.2 tons per hour.

(c) The one (1) magnesium treatment/inoculation operation, identified as EU-6, shall not exceed 19.4 pounds per hour when operating at a process weight rate of 10.2 tons per hour.

(d) The core manufacturing operations, identified as EU-28 and EU-29, exhausting to stack 001, shall not exceed 3.65 pounds per hour, total, when operating at a process weight rate of 0.84 tons per hour of cores manufactured, total.

The pounds per hour limitations were calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required these facilities and their control devices.

Compliance Determination Requirements

D.1.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within one hundred and eighty (180) days after issuance of this Part 70 permit, in order to document compliance with Condition D.1.1, the Permittee shall perform PM and PM_{10} testing on stack 001 utilizing methods as approved by the Commissioner. The respective facilities shall process 100% ductile iron remelt during the tests. This test shall be repeated at least once every five (5) years from the date of valid compliance demonstration. PM_{10} includes filterable and condensible PM_{10}. Testing shall be conducted in accordance with Section C- Performance Testing.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.5 Visible Emissions Notations

(a) Visible emission notations of the exhaust from EU-2, EU-3A, EU-6, EU-28, and EU-29, exhausting to stack 001, shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.6 Record Keeping Requirements

(a) To document compliance with Conditions D.1.1(a), D.1.1(b), D.2.1, and D.3.1, the Permittee shall maintain monthly records of the:

(1) Melt throughput (tons) of steel scrap and ductile iron re-melt delivered to electric induction furnace EU-3A; and

(2) Total propane usage (MMSCF) at the source.

(b) To document compliance with Condition D.1.1(d), the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken daily and shall be complete and sufficient to establish compliance with the VOC usage limits established in Condition D.1.1(d). Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(1) The VOC content of each binder and catalyst used.

(2) The amount of binder and catalyst used on a monthly basis. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(3) The total VOC usage for each month; and

(4) The weight of VOCs emitted for each compliance period.

(c) To document compliance with Condition D.1.5, the Permittee shall maintain records of visible emission notations as required by Condition D.1.5.

(d) To document compliance with Condition D.1.3, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan..

(e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.7 Reporting Requirements

Quarterly summaries of the information to document compliance with Condition D.1.1 shall be submitted to the address(es) listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The reports submitted by the Permittee do require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34). Submission of these reports will document compliance with Conditions D.1.1, D.2.1, and D.3.1.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: units exhausting to stacks 003 and 004

(d) Three (3) pouring/casting machines, identified as EU-7 and EU-8, both constructed in 1997, with emissions controlled by wet collector WC-E, exhausting to stack 004, and EU-9, constructed in 1997, with emissions controlled by wet collector WC-W, exhausting to stack 003, each with a maximum capacity of 3.4 tons of metal and 39 tons of sand per hour;

(e) Three (3) casting/cooling lines, identified as EU-7A, EU-8A, and EU-9A, constructed in 1997, each with a maximum capacity of 3.4 tons of metal and 39 tons of sand per hour, with emissions controlled by wet collector WC-E, and exhausting to stack 004;

(f) Three (3) shake-out units, identified as EU-11, EU-12, and EU-13, all constructed in 1997, each with a maximum capacity of 3.4 tons of metal and 39 tons of sand per hour, with emissions controlled by wet collector WC-E, and exhausting through stack 004;

(g) Sand grinding and handling operations, with a maximum capacity of 50 tons per hour of sand and 10.2 tons per hour of castings, consisting of the following equipment:

(1) One (1) vibrating casting conveyor, identified as EU-16, constructed in 1996, with emissions controlled by wet collector WC-E, and exhausting to stack 004;

(2) One (1) muller, identified as EU-17, constructed in 1971, with emissions controlled by wet collector WC-W, and exhausting to stack 003;

(3) Return sand screens, identified as EU-18, constructed in 1971, with emissions controlled by wet collector WC-W, and exhausting to stack 003;

(4) One (1) return sand conveyor system, identified as EU-27, constructed in 1971, with emissions controlled by wet collector WC-W, and exhausting to stack 003;

And the following storage bins:

(5) Two (2) return sand storage bins, identified as EU-19 and EU-20, both constructed in 1971, with capacities of 80 and 100 tons, respectively, emissions controlled by wet collector WC-W, and exhausting to stack 003;

(6) (See Section D.3)

(7) One (1) bond storage bin, identified as EU-23, constructed in 1971, with a capacity of 1 ton of premixed casting sand binder, emissions controlled by wet collector WC-W, and exhausting to stack 003;

SECTION D.2 FACILITY OPERATION CONDITIONS (continued)

Facility Description [326 IAC 2-7-5(15)]: (continued)

(8) Two (2) outdoor sand storage bins, identified as EU-24 and EU-25, both constructed in 1971, each with a capacity of 150 tons, and sources of fugitive emissions;

(9) One (1) sand storage bin, identified as EU-26, constructed in 1971, with a capacity of 1 ton, emissions controlled by wet collector WC-W, and exhausting to stack 003;

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Production Limitations [326 IAC 2-2] [326 IAC 8-1-6]

(a) Pursuant to SSM 057-10672-00002, issued October 20, 1999, the steel scrap and ductile iron re-melt delivered to the electric induction furnace (EU-3A) (Section D.1) and its associated operations (scrap and charge handling and heating (Section D.1), inoculation (Section D.1), pouring/casting, pouring/casting, casting/cooling, shakeout, sand grinding and handling, tumbleblast cleaning (Section D.3), casting grinding and finishing (Section D.3), and core manufacturing (Section D.1)) shall not exceed 27,900 tons per twelve consecutive month period with compliance determined at the end of each month.

(b) The PM and PM10 emission limits for stacks 003 and 004 are as follows:

Stack (#): Process/facility (ID)	PM (lb/ton)	PM_{10} (lb/ton)
Stack 003: Pouring/Casting Machine (EU-9); Sand Grinding and Handling (EU-17, EU-18, EU-19, EU-20, EU-23, EU-26, EU-27)	7.07	1.79
Stack 004: Pouring/Casting Machines (EU-7, EU-8); Casting/Cooling Lines (EU-7A, EU-8A, and EU-9A); Shake-out Units (EU-11, EU-12, and EU-13); Sand Grinding and Handling (EU-16);	8.16	2.77

Compliance with these limits, in conjunction with Conditions D.1.1(a) and D.3.1(a) [identical to Condition D.2.1(a)], is equivalent to total PM and PM10 emissions (from the entire source) of less than 146.8 and 63.4 tons per year, respectively. Compliance with these limits, and the emissions credits (from the removal of cupola EU-1) of 122 and 97.4 tons per year PM and PM10, respectively, will render the requirements of 326 IAC 2-2 not applicable to the modification completed pursuant to SSM 057-10672-00002, issued October 20, 1999.

(c) The VOC emissions from the following facilities are limited, as indicated below:

Stack (#): Process/facility (ID)	VOC (lb/ton metal)
Stack 003: Pouring/Casting Machines (EU-9)	0.14
Stack 004: Pouring/Casting Machines (EU-7, EU-8); and Shake-out Units (EU-11, EU-12, and EU-13)	1.34

Compliance with this limit in conjunction with Conditions D.2.1(a) and D.1.1(d), is equivalent to total VOC emissions (from the entire source) of less than 25.0 tons per year. Compliance with these limits will render the requirements of 326 IAC 8-1-6 (BACT) and 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to the modification permitted via SSM 057-10672-00002, issued October 20, 1999.

D.2.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from:

(a) The three (3) pouring/casting machines, identified as EU-7, EU-8 and EU-9, shall not exceed 50.5 pounds per hour, each, when operating at a process weight rate of 42.4 tons per hour, each.

(b) The three (3) casting/cooling lines, identified as EU-7A, EU-8A and EU-9A, shall not exceed 50.5 pounds per hour, each, when operating at a process weight rate of 42.4 tons per hour, each.

(c) The three (3) shake-out units, identified as EU-11, EU-12 and EU-13, shall not exceed 50.5 pounds per hour, each, when operating at a process weight rate of 42.4 tons per hour, each.

The pounds per hour limitations were calculated with the following equations:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

(d) The allowable particulate emission rate from the sand grinding and handling operations, identified as EU-16 through EU-20 and EU-22 through EU-27, shall not exceed 46.3 pounds per hour, total, when operating at a total process weight rate of 60.2 tons per hour, total.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

D.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required these facilities and their control devices.

Compliance Determination Requirements

D.2.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Pursuant to SSM 057-10672-00002, issued October 20, 1999:

(a) Within one hundred and eighty (180) days after issuance of this Part 70 permit, the Permittee shall perform PM and PM_{10} testing for two (2) casting machines (EU-7 and EU-8), the three (3) cooling lines (EU-7A, EU-8A and EU-9A), three (3) shakeout units (EU-11, EU-12 and EU-13), and one (1) casting vibrating conveyor (EU-16), all exhausting through wet collector WC-E (stack 004) utilizing methods as approved by the Commissioner. The respective facilities shall process 100% ductile iron remelt during the tests. This test shall be repeated at least once every five (5) years from the date of valid compliance demonstration. PM_{10} includes filterable and condensible PM_{10}. Testing shall be conducted in accordance with Section C- Performance Testing.

(b) Within one hundred and eighty (180) days after issuance of this Part 70 permit, the Permittee shall perform PM and PM_{10} testing for the one (1) casting machine (EU-9), one (1) muller (EU-17), the return sand screens (EU-18), one (1) return sand conveyor system (EU-27) and the four (4) storage bins (EU-19, EU-20, EU-23 and EU-26), all exhausting through wet collector WC-W (stack 003) utilizing methods as approved by the Commissioner. The respective facilities shall process 100% ductile iron remelt during the tests. This test shall be repeated at least once every five (5) years from the date of valid compliance demonstration. PM_{10} includes filterable and condensible PM_{10}. Testing shall be conducted in accordance with Section C- Performance Testing.

D.2.5 Particulate Control

Pursuant to SSM 057-10672-00002, issued October 20, 1999, and in order to comply with Conditions D.2.1 and D.2.2, the wet collectors, identified as WC-W and WC-E, for particulate control shall be in operation at all times when the three (3) casting machines, identified as EU-7, EU-8 and EU-9, three (3) cooling lines, identified as EU-7A, EU-8A and EU-9A, three (3) shake-out units, identified as EU-11, EU-12, and EU-13, one (1) vibrating casting conveyor, identified as EU-16, one (1) muller, identified as EU-17, return sand screens, identified as EU-18, one (1) return sand conveyor system, identified as EU-27, two (2) return sand storage bins, identified as EU-19 and EU-20, one (1) bond storage bin, identified as EU-23, and one (1) sand storage bin, identified as EU-26 are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.6 Visible Emissions Notations

(a) Visible emission notations of the exhaust from wet collectors WC-W and WC-E, exhausting to stacks 003 and 004, respectively, shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to

take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.2.7 Parametric Monitoring - Wet Collectors

The Permittee shall record the total static pressure drop across the wet collectors used in conjunction with the three (3) casting machines, identified as EU-7, EU-8 and EU-9, three (3) cooling lines, identified as EU-7A, EU-8A and EU-9A, and three (3) shake-out units, identified as EU-11, EU-12, and EU-13, the one (1) vibrating casting conveyor, identified as EU-16, one (1) muller, identified as EU-17, return sand screens, identified as EU-18, one (1) return sand conveyor system, identified as EU-27, two (2) return sand storage bins, identified as EU-19 and EU-20, one (1) bond storage bin, identified as EU-23, and one (1) sand storage bin, identified as EU-26, at least once per shift when the casting, cooling, shake out, sand grinding and handling processes are in operation. When for any one reading, the pressure drop across the wet collector is outside the normal range of 3.0 to 5.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.2.8 Wet Collector Inspections

An inspection shall be performed each calender quarter of all wet collectors controlling the three (3) casting machines, identified as EU-7, EU-8 and EU-9, three (3) cooling lines, identified as EU-7A, EU-8A and EU-9A, and three (3) shake-out units, identified as EU-11, EU-12, and EU-13, the one (1) casting vibrating conveyor, identified as EU-16, one (1) muller, identified as EU-17, return sand screens, identified as EU-18, one (1) return sand conveyor system, identified as EU-27, two (2) return sand storage bins, identified as EU-19 and EU-20, one (1) bond storage bin, identified as EU-23, and one (1) sand storage bin, identified as EU-26. Wet collector inspections shall be performed within three months of installation and every three months thereafter. Inspections required by this condition shall not be performed in consecutive months. All defective or failed wet collector parts shall be replaced.

D.2.9 Broken or Failed Wet Collector Detection

In the event that wet collector failure has been observed.

The effected units, identified as EU-7, EU-8, EU-9, EU-7A, EU-8A, EU-9A, EU-11, EU-12, EU-13, EU-16, EU-17, EU-18, EU-19, EU-20, EU-23, EU-26, and EU-27, will be shut down immediately until the failed wet collector units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.10 Record Keeping Requirements

(a) To document compliance with Condition D.2.6, the Permittee shall maintain records of visible emission notations of the exhausts from stacks 003 and 004.

(b) To document compliance with Condition D.2.7, the Permittee shall maintain once per shift records of the total static pressure drop of wet collectors WC-E and WC-W as required by Condition D.2.7.

(c) To document compliance with Condition D.2.8, the Permittee shall maintain records of the results of the inspections required under Condition D.2.8.

(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Note that compliance with Conditions D.1.9(a) and D.1.10 will document and report compliance with Condition D.2.1. As a result, no record keeping or reporting requirements are included for Condition D.2.1 here.

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: units exhausting to stacks 006 and 007

(g)(6) Sand grinding and handling operations, with a maximum capacity of 50 tons per hour of sand and 10.2 tons per hour of castings, consisting of the following equipment:

One (1) bond storage bin, identified as EU-22, constructed in 1978, with a capacity of 80 tons of premixed casting sand binder, emissions controlled by baghouse BH-2, and exhausting to stack 007;

(i) Tumbleblast cleaning operations, with a maximum capacity of 5.6 tons per hour of castings and 15 tons per hour of steel shot, consisting of the following equipment:

(1) One (1) shot blast machine, identified as EU-30, constructed in 1963, emissions controlled by baghouse BH-1, and exhausting to stack 006;

(2) One (1) shot blast machine, identified as EU-31, constructed in 1992, emissions controlled by baghouse BH-1, and exhausting to stack 006;

(j) Casting, grinding and finishing operations with a maximum throughput of 5.6 tons per hour of finished castings, consisting of the following equipment:

(1) Ten (10) grinding units, identified as EU-32, constructed in 1965, emissions controlled by baghouse BH-1, and exhausting to stack 006;

(2) Ten (10) finishing (air burr) units, identified as EU-33, all constructed in 1992, emissions controlled by baghouse BH-1, and exhausting to stack 006.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Production Limitations [326 IAC 2-2]

(a) Pursuant to SSM 057-10672-00002, issued October 20, 1999, the steel scrap and ductile iron re-melt delivered to the electric induction furnace (EU-3A) (Section D.1) and its associated operations (scrap and charge handling and heating (Section D.1), inoculation (Section D.1), pouring/casting (Section D.2), pouring/casting, casting/cooling (Section D.2), shakeout (Section D.2), sand grinding and handling (Section D.2), tumbleblast cleaning, casting grinding and finishing, and core manufacturing (Section D.1)) shall not exceed 27,900 tons per twelve consecutive month period with compliance determined at the end of each month.

(b) The PM and PM10 emission limits for stacks 006 and 007 are as follows:

Stack (#): Process/facility (ID)	PM (lb/ton)	PM_{10} (lb/ton)
Stack 006: Tumbleblast Cleaning (EU-30 and EU-31); Casting, Grinding, and Finishing (EU-32 and EU-33)	0.28	0.029
Stack 007: Sand Grinding and Handling (EU-22)	5.65	0.84

Compliance with these limits, in conjunction with Conditions D.1.1(a) and D.2.1(a) [identical to Condition D.3.1(a)], is equivalent to total PM and PM10 emissions (from the entire source) of less than 146.8 and 63.4 tons per year, respectively. Compliance with these limits, and the emissions credits (from the removal of cupola EU-1) of 122 and 97.4 tons per year PM and PM10, respectively, will render the requirements of 326 IAC 2-2 not applicable to the modification completed via SSM 057-10672-00002, issued October 20, 1999.

D.3.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from:

(a) The tumbleblast cleaning operations, identified as EU-30 and EU-31 shall not exceed 31.1 pounds per hour, total, when operating at a process weight rate of 20.6 tons per hour, total.

(b) The casting grinding and finishing operations, identified as EU-32 and EU-33 shall not exceed 13.0 pounds per hour, total, when operating at a process weight rate of 5.6 tons per hour, total.

The pounds per hour limitations were calculated with the following equations:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

Note that the 326 IAC 6-3-2 emission limitation for EU-22 is included as Condition D.2.2(d).

D.3.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required these facilities and their control devices.

Compliance Determination Requirements

D.3.4 Particulate Control

Pursuant to SSM 057-10672-00002, issued October 20, 1999, and in order to comply with Conditions D.3.1 and D.3.2:

(a) The baghouse, identified as BH-1, for particulate control shall be in operation at all times when the two (2) shot blast machines, identified as EU-30 and EU-31, ten (10) grinding units, identified as EU-32, and ten (10) finishing (air burr) units, identified as EU-33, are in operation.

(b) The baghouse, identified as BH-2, for particulate control shall be in operation at all times when the bond storage bin, identified as EU-22, is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.3.5 Visible Emissions Notations

(a) Visible emission notations of exhaust from stacks 006 and 007 shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.3.6 Parametric Monitoring - Baghouses

The Permittee shall record the total static pressure drop across the baghouses, identified as BH-1 and BH-2, used in conjunction with the bond storage bin, identified as EU-22, two (2) shot blast machines, identified as EU-30 and EU-31, ten (10) grinding units, identified as EU-32, and ten (10) finishing (air burr) units, identified as EU-33, at least once per shift when the respective facilities are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 and 4.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.3.7 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the bond storage bin, identified as EU-22, two (2) shot blast machines, identified as EU-30 and EU-31, ten (10) grinding units, identified as EU-32, and ten (10) finishing (air burr) units, identified as EU-33. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.

D.3.8 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units

and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.9 Record Keeping Requirements

(a) To document compliance with Condition D.3.5, the Permittee shall maintain records of visible emission notations of the exhausts from stacks 006 and 007.

(b) To document compliance with Condition D.3.6, the Permittee shall maintain once per shift records of the total static pressure drop as required by Condition D.3.6.

(c) To document compliance with Condition D.3.7, the Permittee shall maintain records of the results of the inspections required under Condition D.3.7.

(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Note that compliance with Conditions D.1.9(a) and D.1.10 will document and report compliance with Condition D.3.1. As a result, no record keeping or reporting requirements are included for Condition D.3.1 here.

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Specifically Regulated Insignificant Activities

(b) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment cutting torches, soldering equipment, and welding equipment. [40 CFR 52 Subpart P][326 IAC 6-3-2]

(c) Structural steel and bridge fabrication activities: using 80 tons or less of welding consumables and cutting 200,000 linear feet or less of one inch plate or equivalent. [40 CFR 52 Subpart P][326 IAC 6-3-2]

(d) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 Particulate [40 CFR 52 Subpart P][326 IAC 6-3-2]

Pursuant to 40 CFR 52 Subpart P, any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and pursuant to 326 IAC 6-3-2(e), any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and to which the provisions of 326 IAC 6-3-2(b) through (d) do not apply, the allowable particulate emission rate from the insignificant brazing, cutting, soldering, welding, and structural steel and bridge fabrication activities shall not exceed 0.551 pounds per hour for a process weight rate of less than 100 pounds per hour.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: Indiana Ductile, LLC
Source Address: 1600 South 8th Street, Noblesville, Indiana 46060
Mailing Address: 1600 South 8th Street, Noblesville, Indiana 46060
Part 70 Permit No.: T057-13975-00002

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

9 Annual Compliance Certification Letter

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 Affidavit (specify) _____

9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Phone:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

COMPLIANCE BRANCH
100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: Indiana Ductile, LLC
Source Address: 1600 South 8th Street, Noblesville, Indiana 46060
Mailing Address: 1600 South 8th Street, Noblesville, Indiana 46060
Part 70 Permit No.: T057-13975-00002

This form consists of 2 pages **Page 1 of 2**

9 This is an emergency as defined in 326 IAC 2-7-1(12)

- The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16.

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance Data Section

Part 70 Quarterly Report

Source Name: Indiana Ductile, LLC
Source Address: 1600 South 8th Street, Noblesville, Indiana 46060
Mailing Address: 1600 South 8th Street, Noblesville, Indiana 46060
Part 70 Permit No.: T057-13975-00002
Facility: One (1) 10.2 ton per hour electric induction furnace (EU-3A)
Parameter: Throughput of metal melted
Limit: 27,900 tons steel scrap and ductile iron re-melt per twelve consecutive month period with compliance determined at the end of each month

YEAR: _____

Month	Column 1 (metal throughput)	Column 2 (metal throughput)	Column 1 + Column 2 (metal throughput)
	This Month (tons)	Previous 11 Months (tons)	12 Month Total (tons)
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance Data Section

Part 70 Quarterly Report

Source Name: Indiana Ductile, LLC
Source Address: 1600 South 8th Street, Noblesville, Indiana 46060
Mailing Address: 1600 South 8th Street, Noblesville, Indiana 46060
Part 70 Permit No.: T057-13975-00002
Facility: entire source
Parameter: total amount of propane used
Limit: The total amount of propane used at the source shall not exceed forty-five (45.0) million standard cubic feet (MMSCF) per twelve consecutive month period with compliance determined at the end of each month.

YEAR: _____

Month	Column 1 (propane usage)	Column 2 (propane usage)	Column 1 + Column 2 (propane usage)
	This Month (MMSCF)	Previous 11 Months (MMSCF)	12 Month Total (MMSCF)
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance Data Section

Part 70 Quarterly Report

Source Name: Indiana Ductile, LLC
Source Address: 1600 South 8th Street, Noblesville, Indiana 46060
Mailing Address: 1600 South 8th Street, Noblesville, Indiana 46060
Part 70 Permit No.: T057-13975-00002
Facility: Core manufacturing operations
Parameter: Total amount of VOC used (from binder and catalyst)
Limit: 6.11 tons of VOC per twelve consecutive month period with compliance determined at the end of each month

YEAR: _____

Month	Column 1 (VOC used)	Column 2 (VOC used)	Column 1 + Column 2 (VOC used)
	This Month (tons)	Previous 11 Months (tons)	12 Month Total (tons)
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance Data Section

PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Indiana Ductile, LLC
Source Address: 1600 South 8th Street, Noblesville, Indiana 46060
Mailing Address: 1600 South 8th Street, Noblesville, Indiana 46060
Part 70 Permit No.: T057-13975-00002

Months: _____ to _____ Year: _____

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".
9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.
9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the
Technical Support Document for a Title V Part 70 Operating Permit

Source Name: Indiana Ductile, LLC
Source Location: 1600 South 8th Street, Noblesville, Indiana 46060
County: Hamilton
SIC Code: 3321
Operation Permit No.: T057-13975-00002
Permit Reviewer: ERG/BS

On July 1, 2003, the Office of Air Quality (OAQ) had a notice published in the Noblesville Ledger in Noblesville Indiana, stating that Indiana Ductile, LLC had applied for a Title V Part 70 Operating Permit to operate a ductile iron and steel foundry. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Upon further review, the OAQ has decided to make the following revisions to the permit (bolded language has been added, the language with a line through it has been deleted). The Table Of Contents has been modified to reflect these changes.

1. The following changes have been made because the tundish ladle lids can not capture or control the smoke generated by the magnesium treatment/inoculation operation, identified as EU-6. There is an opening in the middle of each lid which allows the release of emissions from the operation.

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

...

(c) One (1) magnesium treatment/inoculation operation, identified as EU-6, constructed in 1971, with a maximum capacity of 10.2 tons per hour, with emissions **un**controlled ~~by tundish ladle lids for enclosed transfer operations~~, and exhausting to the general area ventilation which exhausts to stack 001;

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: units exhausting to stack 001 and combustion sources

...

(c) One (1) magnesium treatment/inoculation operation, identified as EU-6, constructed in 1971, with a maximum capacity of 10.2 tons per hour, with emissions **un**controlled ~~by tundish ladle lids for enclosed transfer operations~~, and exhausting to the general area ventilation which exhausts to stack 001;

...

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

~~D.1.4 Particulate Control~~

~~Pursuant to SSM 057-10672-00002, issued October 20, 1999, and in order to comply with Conditions D.1.1 and D.1.2, the tundish ladle lids for particulate control shall control emissions from the magnesium treatment/inoculation operation, identified as EU-6, at all times when EU-6 is in operation.~~

D.1.**4** ~~5~~ Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within one hundred and eighty (180) days after issuance of this Part 70 permit, in order to document compliance with Condition D.1.1, the Permittee shall perform PM and PM_{10} testing on stack 001 utilizing methods as approved by the Commissioner. The respective facilities shall process 100% ductile iron remelt during the tests. This test shall be repeated at least once every five (5) years from the date of valid compliance demonstration. PM_{10} includes filterable and condensible PM_{10}. Testing shall be conducted in accordance with Section C- Performance Testing.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1 **5** ~~6~~ Visible Emissions Notations

(a) Visible emission notations of the exhaust from EU-2, EU-3A, EU-6, EU-28, and EU-29, exhausting to stack 001, shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

...

~~D.1.7 Tundish Ladle Lid Inspections~~

~~An inspection shall be performed each calender quarter of all tundish ladle lids controlling the one (1) magnesium treatment/inoculation operation, identified as EU-6. A tundish ladle lid inspection shall be performed within three months of installation and every three months thereafter. All defective tundish ladle lids and defective tundish ladle lid parts shall be replaced.~~

~~D.1.8 Broken or Failed Tundish Ladle Lid Detection~~

~~In the event that tundish ladle lid failure has been observed.~~

~~The effected unit, identified as EU-6, will be shut down immediately until the failed tundish ladle lid units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).~~

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.**6** ~~9~~ Record Keeping Requirements

...

(c) To document compliance with Condition D.1.~~6~~ **5**, the Permittee shall maintain records of visible emission notations as required by Condition D.1.~~6~~ **5**.

(d) To document compliance with Condition ~~D.1.7 the Permittee shall maintain records of the results of the inspections required under Condition D.1.7.~~ **D.1.3, the Permittee shall**

maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.

D.1.~~7~~**8**~~10~~ Reporting Requirements

Quarterly summaries of the information to document compliance with Condition D.1.1 shall be submitted to the address(es) listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The reports submitted by the Permittee do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Submission of these reports will document compliance with Conditions D.1.1, D.2.1, and D.3.1.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Part 70 Operating Permit

Source Background and Description

Source Name:	Indiana Ductile, LLC
Source Location:	1600 South 8th Street, Noblesville, Indiana 46060
County:	Hamilton
SIC Code:	3321
Operation Permit No.:	T057-13975-00002
Permit Reviewer:	ERG/BS

The Office of Air Quality (OAQ) has reviewed a Part 70 permit application from Indiana Ductile, LLC relating to the operation of a ductile iron and steel foundry.

History

The OAQ received a Part 70 permit application from Noblesville Castings, Inc. (NCI) relating to the operation of a ductile iron foundry on August 30, 1996.

According to a letter dated April 15, 1998, NCI met with representatives of OAQ to discuss modifications planned for the source. At that time, it was determined that two phases of construction would be undertaken before the completion of a Part 70 permit.

The first application of two planned construction permits for this source was submitted on April 13, 1998. On September 10, 1998, the OAQ issued CP 057-9664-00002 to: add two (2) 10.2 ton per hour electric induction furnaces (EU-3A and EU-3B), add one (1) reactivated Schneible medium to heavy load wet collector WC-W, and the removal of two (2) 2.5 ton per hour electric induction furnaces (EU-4 and EU-5). The entire source was limited to 11,960 tons per year, equivalent to 996.6 tons per month, of fifty percent (50%) steel scrap and fifty percent (50%) ductile iron re-melt in order to remain under the PSD significance levels.

On February 17, 1999, the OAQ received the second application from NCI for the second phase of construction (SSM 057-10672-00002) to: remove one (1) cupola (EU-1), add emission controls to the magnesium treatment/ inoculation operation (EU-6), and increase the allowable melt throughput of the source to 35,400 tons per year of fifty percent (50%) steel scrap and fifty percent (50%) ductile iron re-melt. During the permit review process it was determined that only one (1) of the two 2.5 ton per hour electric induction furnaces (EU-4) had been removed as permitted in CP 057-9664-00002. NCI informed the OAQ that the second 2.5 ton per hour electric induction furnace (EU-5) was to be converted, rather than removed, to a 2.5 ton per hour electric holding furnace (still identified as EU-5). On October 20, 1999, the OAQ issued significant source modification SSM 057-10672-00002 to NCI for: the removal of one (1) cupola (EU-1), the addition of emission controls (tundish ladle lids) to the magnesium treatment operation (EU-6), and the conversion, rather than the removal, of one (1) 2.5 ton per hour electric induction furnace to an electric holding furnace (EU-5), and an increase in the entire source's melt throughput limit to 35,400 tons per year of fifty percent (50%) steel scrap and fifty percent (50%) ductile iron re-melt.

In the first quarter of 2000, NCI went bankrupt. As a result, the equipment that NCI operated went up for auction and was purchased by Indiana Ductile several months later. On October 11,

2000, the OAQ issued A 057-12319-00002 to SSM 057-10672-00002 to document the transfer of ownership of the source to Indiana Ductile.

On August 16, 2002, Indiana Ductile informed the OAQ that they had removed cupola EU-1 and furnace EU-4, had never constructed furnace EU-3B, and removed, rather than converted, furnace EU-5. As a result, previously permitted units EU-1, EU-3B, EU-4, and EU-5 are not included in this Part 70 permit.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following emission units and pollution control devices:

(a) One (1) scrap and charge handling and heating operation, identified as EU-2, constructed in 1998, with a maximum capacity of 10.2 tons per hour, with emissions uncontrolled, and exhausting to the general area ventilation which exhausts to stack 001;

(b) One (1) electric induction furnace, identified as EU-3A, constructed in 1998, with a maximum capacity of 10.2 tons per hour, with emissions uncontrolled, and exhausting to the general area ventilation which exhausts to stack 001;

(c) One (1) magnesium treatment/inoculation operation, identified as EU-6, constructed in 1971, with a maximum capacity of 10.2 tons per hour, with emissions controlled by tundish ladle lids for enclosed transfer operations, and exhausting to the general area ventilation which exhausts to stack 001;

(d) Three (3) pouring/casting machines, identified as EU-7 and EU-8, both constructed in 1997, with emissions controlled by wet collector WC-E, exhausting to stack 004, and EU-9, constructed in 1997, with emissions controlled by wet collector WC-W, exhausting to stack 003, each with a maximum capacity of 3.4 tons of metal and 39 tons of sand per hour;

(e) Three (3) casting/cooling lines, identified as EU-7A, EU-8A, and EU-9A, constructed in 1997, each with a maximum capacity of 3.4 tons of metal and 39 tons of sand per hour, with emissions controlled by wet collector WC-E, and exhausting to stack 004;

(f) Three (3) shake-out units, identified as EU-11, EU-12, and EU-13, all constructed in 1997, each with a maximum capacity of 3.4 tons of metal and 39 tons of sand per hour, with emissions controlled by wet collector WC-E, and exhausting through stack 004;

(g) Sand grinding and handling operations, with a maximum capacity of 50 tons per hour of sand and 10.2 tons per hour of castings, consisting of the following equipment:

(1) One (1) vibrating casting conveyor, identified as EU-16, constructed in 1996, with emissions controlled by wet collector WC-E, and exhausting to stack 004;

(2) One (1) muller, identified as EU-17, constructed in 1971, with emissions controlled by wet collector WC-W, and exhausting to stack 003;

(3) Return sand screens, identified as EU-18, constructed in 1971, with emissions controlled by wet collector WC-W, and exhausting to stack 003;

(4) One (1) return sand conveyor system, identified as EU-27, constructed in 1971, with emissions controlled by wet collector WC-W, and exhausting to stack 003;

And the following storage bins:

(5) Two (2) return sand storage bins, identified as EU-19 and EU-20, both constructed in 1971, with capacities of 80 and 100 tons, respectively, emissions controlled by wet collector WC-W, and exhausting to stack 003;

(6) One (1) bond storage bin, identified as EU-22, constructed in 1978, with a capacity of 80 tons of premixed casting sand binder, emissions controlled by baghouse BH-2, and exhausting to stack 007;

(7) One (1) bond storage bin, identified as EU-23, constructed in 1971, with a capacity of 1 ton of premixed casting sand binder, emissions controlled by wet collector WC-W, and exhausting to stack 003;

(8) Two (2) outdoor sand storage bins, identified as EU-24 and EU-25, both constructed in 1971, each with a capacity of 150 tons, and sources of fugitive emissions;

(9) One (1) sand storage bin, identified as EU-26, constructed in 1971, with a capacity of 1 ton, emissions controlled by wet collector WC-W, and exhausting to stack 003;

(h) Core manufacturing operations with a maximum production rate of 0.84 tons per hour of manufactured cores, with emissions uncontrolled, consisting of the following equipment:

(1) Four (4) shell core machines, identified as EU-28, constructed in 1964, each with maximum capacity of 50 lb VOC/ton from catalyst use and 1.3 lb VOC/ton from binder use, a heat input capacity of 2.09 MMBtu/hr per machine, and exhausting to the general area ventilation which exhausts to stack 001;

(2) Two (2) isocure core machines, identified as EU-29, constructed in 1976 and 1997, respectively, each with maximum capacity of 30 lb VOC/ton from catalyst use and 1.1 lb VOC/ton from binder use, and exhausting to the general area ventilation which exhausts to stack 001;

(i) Tumbleblast cleaning operations, with a maximum capacity of 5.6 tons per hour of castings and 15 tons per hour of steel shot, consisting of the following equipment:

(1) One (1) shot blast machine, identified as EU-30, constructed in 1963, emissions controlled by baghouse BH-1, and exhausting to stack 006;

(2) One (1) shot blast machine, identified as EU-31, constructed in 1992, emissions controlled by baghouse BH-1, and exhausting to stack 006;

(j) Casting, grinding and finishing operations with a maximum throughput of 5.6 tons per hour of finished castings, consisting of the following equipment:

(1) Ten (10) grinding units, identified as EU-32, constructed in 1965, emissions controlled by baghouse BH-1, and exhausting to stack 006;

(2) Ten (10) finishing (air burr) units, identified as EU-33, all constructed in 1992, emissions controlled by baghouse BH-1, and exhausting to stack 006.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities at this source during this review process.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) Propane-fired combustion sources with heat input equal to or less than six million (6,000,000) Btu per hour [326 IAC 2-2]:

(1) Two (2) 0.5 MMBtu/hr heating ladle torches;

(2) One (1) 0.5 MMBtu/hr core drying conveyor heating torch;

(3) Two (2) 0.5 MMBtu/hr auto pour torches.

(b) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment cutting torches, soldering equipment, and welding equipment. [40 CFR 52 Subpart P][326 IAC 6-3-2]

(c) Structural steel and bridge fabrication activities: using 80 tons or less of welding consumables and cutting 200,000 linear feet or less of one inch plate or equivalent. [40 CFR 52 Subpart P][326 IAC 6-3-2]

(d) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]

(e) Refractory storage not requiring air pollution control equipment.

(f) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

(g) The following VOC and HAP storage containers: Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons; Vessels storing lubricating oils, hydraulic oils, and machining fluids.

(h) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.

Existing Approvals

The source has constructed and has been operating under the following previous approvals:

(a) OP 29-04-87-0109, issued April 1, 1987;

(b) CP 057-9664-00002, issued September 10, 1998;

(c) SSM 057-10672-00002, issued October 20, 1999; and

(d) A 057-12319-00002, issued October 11, 2000.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

The following terms and conditions from previous approvals have been determined no longer applicable; therefore, were not incorporated into this Part 70 permit:

(a) All construction conditions from all previously issued permits.

Reason not incorporated:
All facilities previously permitted have already been constructed; therefore, the construction conditions are no longer necessary as part of the operating permit. Any facilities that were previously permitted but have not yet been constructed would need new pre-construction approval before beginning construction.

(b) Condition 10(a) and 10(b) from CP 057-9664-00002, issued on September 10, 1998:
The input of the two (2) 10.2 ton per hour electric induction furnaces and their associated operations (scrap and charge handling and heating, inoculation, pouring casting, casting cooling, shakeout, sand grinding and handling, tumbleblast cleaning, casting grinding and finishing, core manufacture and sand handling) shall be limited to 11,960 tons per year, which consists of, no greater than fifty percent (50%) steel scrap and fifty percent (50%) ductile iron re-melt. The production limitation is equivalent to 27.2 tons per year PM and 22.3 tons per year PM10.

Reason not incorporated:
Pursuant to SSM 057-10672-00002, issued October 20, 1999, the limited throughput to the two (2) 10.2 ton per hour electric induction furnaces and their associated operations was increased from 11,960 tons per year to 35,400 tons per year of fifty percent (50%) steel scrap and fifty percent (50%) ductile iron re-melt. The 35,400 tons per year throughput limit accounted for netting credits of 122 tons of PM per year, 97.4 tons of PM_{10} per year, 11.3 tons of SO_2 per year, 20.3 tons of VOC per year, 1,855 tons of CO per year and 3.19 tons of NO_X per year from the removal of one (1) cupola. The 35,400 tons per year limited melt throughput is equivalent to 105 tons per year of PM emissions and 81.2 tons per year of PM_{10} emissions. Therefore, the increased melt throughput coupled with the netting credit for removing the cupola results in emissions less than the PSD significant levels. See below for additional information pertaining to additional revisions to the melt throughput.

The following terms and conditions from previous approvals have been revised in this Part 70 permit:

(a) Condition D.1.1 from SSM 057-10672-00002, issued on October 20, 1999:
The fifty percent (50%) steel scrap and fifty percent (50%) ductile iron re-melt delivered to the two (2) 10.2 ton per hour electric induction furnaces (EU-3A and EU-3B) and their associated operations (scrap and charge handling and heating, inoculation, holding, pouring casting, casting cooling, shakeout, sand grinding and handling, tumbleblast cleaning, casting grinding and finishing, core manufacture and sand handling) shall be limited to 35,400 tons per twelve consecutive month period. The one (1) 2.5 ton per hour electric holding furnace, known as EU-5, shall only be used for holding the melted fifty percent (50%) steel scrap and fifty percent (50%) ductile iron re-melt delivered from the two (2) 10.2 ton per hour electric induction furnaces, known as EU-3A and EU-3B.

Revised condition:
Pursuant to SSM 057-10672-00002, issued on October 20, 1999, the steel scrap and ductile iron re-melt delivered to the 10.2 ton per hour electric induction furnace (EU-3A) and its associated operations (scrap and charge handling and heating, inoculation, holding, pouring casting, casting cooling, shakeout, sand grinding and handling, tumbleblast cleaning, casting grinding and finishing, core manufacture and sand handling) shall be limited to 27,900 tons per twelve consecutive month period. Compliance with this limit will render the requirements of 326 IAC 2-2 (PSD) not applicable.

Reason revised:
1. Furnaces EU-3B, EU-4, and EU-5 were never constructed. As a result, the source-wide production/throughput limit now applies only to furnace EU-3A and its associated operations.

2. The PM emission factors for units EU-16 through EU-20, EU-22 through EU-27 (Sand Grinding and Handling), EU-30, and EU-31 (Tumbleblast Cleaning), have been updated to reflect current AP-42 emission factors from Ch. 12.10. As a result, the production/throughput limit has been reduced from 35,400 tons per twelve consecutive month period to 27,900 tons to ensure that the net PM emissions from the source are less than the applicable PSD thresholds. To illustrate this change a revised PSD netting analysis has been completed. See State Rule Applicability - 326 IAC 2-2 for details.
3. The fifty percent (50%) steel scrap and fifty percent (50%) ductile iron re-melt specification of the previous production limit has been removed because the emissions, on which the limit is derived, are now based on the worst case emission factors for iron and steel foundries. As a result, fifty percent (50%) steel scrap and fifty percent (50%) ductile iron re-melt requirement is not necessary to determine compliance.

(b) Condition D.1.2 from SSM 057-10672-00002, issued on October 20, 1999:
Pursuant to 326 IAC 6-3-2, the PM emissions from facilities EU-2, EU-7, EU-8, EU-9, EU-7A, EU-8A, EU-9A, EU-11, EU-12, EU-13, EU-30, EU-31, EU-16 through EU-20, and EU-22 through EU-27 are limited based on a process weight rate of 20.4 tons per hour, each.

Reason revised:
The process weight rate of facilities EU-2, EU-7, EU-8, EU-9, EU-7A, EU-8A, EU-9A, EU-11, EU-12, EU-13, EU-30, EU-31, EU-16 through EU-20, and EU-22 through EU-27 depends on the maximum capacity of the supporting furnace(s). Since only one of the two planned 10.2 ton per hour furnaces was constructed, the maximum process capacity of these facilities is 10.2 tons per hour (the capacity of EU-3A) instead of 20.4 tons per hour (the aggregate capacity of EU-3A and EU-3B). The subsequent emission limitations, pursuant to 326 IAC 6-3-2, have been revised accordingly. See the State Rule Applicability - 326 IAC 6-3-2 section of this document for the appropriate limitations.

Enforcement Issue

(a) IDEM is aware that the source failed to take corrective action when the pressure drop across wet collectors WC-E and WC-W fell outside of the appropriate range; a violation of Condition D.1.10 of SSM 057-10672-00002, issued issued October 20, 1999.

(b) IDEM is aware that the source did not have a Compliance Response Plan that specified response steps to be taken when the pressure drop across wet collectors WC-E and WC-W falls outside of the appropriate range; a violation of Condition C.10(a)(5) of SSM 057-10672-00002, issued issued October 20, 1999.

(c) IDEM is reviewing this matter and will take appropriate action.

Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete Part 70 permit application for the purposes of this review was received on August 30, 1996. Additional information was received in February 2001, May 2002, and April 2003.

Note that the source's potential to emit after issuance is less than Part 70 permitting thresholds. The source has specifically requested a Part 70 permit, instead of a FESOP, in order to

accommodate expected future modifications. Future modifications will be reviewed pursuant to 326 IAC 2.

There was no notice of completeness letter mailed to the source.

Emission Calculations

See Appendix A (pages 1 through 12) of this document for detailed emissions calculations. The emission calculations are based on those from SSM 057-10672-00002, issued October 20, 1999 and revised to account for: 1) a source-wide metal processing capacity of 10.2 tons per hour (instead of 20.4 tons per hour), and 2) appropriate AP-42 PM emission factors.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit. The following table reflects the PTE after controls and limits since controls and limits are federally enforceable pursuant to SSM 057-10672-00002, issued October 20, 1999.

Pollutant	Potential To Emit (tons/year)
PM	greater than 100
PM-10	less than 100
SO_2	less than 100
VOC	less than 100
CO	less than 100
NO_x	less than 100

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
Acrolein	less than 10
Benzene	less than 10
Formaldehyde	less than 10
Hydrogen Cyanide	less than 10
M-Xylene	less than 10
Naphthalene	less than 10
O-Xylene	less than 10
Phenol	less than 10
Toluene	less than 10
Triethylamine	less than 10
Beryllium	less than 10
Lead	less than 10
Nickel	less than 10
Chromium	less than 10
Manganese	less than 10
TOTAL	less than 25

(a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(b) Fugitive Emissions
Since this type of operation is one of the twenty-eight (28) listed source categories (a secondary metal production plant) under 326 IAC 2-2, the fugitive emissions are counted toward determination of PSD applicability.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2001 OAQ Emission Data.

Pollutant	Actual Emissions (tons/year)
PM	not reported
PM-10	5
SO_2	0
VOC	0
CO	not reported
NO_x	0
Lead	0.11

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 operating permit.

Limited Potential to Emit (tons/year)							
Process/facility	PM	PM-10	SO_2	VOC	CO	NO_X	HAPs
Scrap and Charge Handling and Heating (EU-2) (stack 001)	8.4	5.0	0	0	0	0	0.05
Electric Induction Furnace (EU-3A) (stack 001)	12.6	12.0	0	0	0	0	Negl.
Magnesium Treatment/ Inoculation (EU-6)(stack 001)	7.5	6.8	0	0.07[(a)]	0	0	Negl.
Pouring/Casting Machines (EU-7, EU-8, and EU-9)(stacks 003 and 004)	19.8	13.2	0.28	2.0[(a)]	0	0.14	0.2
Casting/Cooling Lines (EU-7A, EU-8A, and EU-9A)(stack 004)	10.0	10.0	0	0	0	0	Negl.

Limited Potential to Emit (tons/year)							
Process/facility	PM	PM-10	SO_2	VOC	CO	NO_X	HAPs
Shake-out Units (EU-11, EU-12, and EU-13)(stack 004)	5.3	3.7	0	16.7[(a)]	0	0	0.03
Sand Grinding and Handling (EU-16 through EU-20, EU-22 through EU-27) (stacks 003, 004, and 007)	78.8	11.8	0	0	0	0	Negl.
Core Manufacturing and Handling (EU-28 and EU-29)(stack 001)	0.34	0.31	0	6.1[(a)]	0	0	6.1
Tumbleblast Cleaning (EU-30 and EU-31)(stack 006)	3.9	0.4	0	0	0	0	Negl.
Casting, Grinding, and Finishing (EU-32 and EU-33)(stack 006)	Negl.	Negl.	0	0	0	0	Negl.
Emissions from Propane combustion	0.17	0.17	0.014	0.124[(a)]	1.89	2.25	Negl.
Total Emissions	146.8	63.4	0.3	less than 25.0	1.9	2.4	6.2

Negl. - Negligible (less than 0.01 tons per year)
The allowable emissions presented in the table above equal the controlled emissions from the operations based on the production limitation of 27,900 tons per twelve consecutive month period of steel scrap and ductile iron re-melt and a propane usage limit of 45.0 MMCF/yr established to render the requirements of 326 IAC 2-2 and 40 CFR 52.21 (PSD) not applicable. The control devices are required to be in operation at all times the respective facilities are in operation pursuant to SSM 057-10672-00002, issued October 20, 1999. See Appendix A and the State Rule Applicability - 326 IAC 2-2 section of this document for more information.
(a) These facilities are limited, as indicated, to render the requirements of 326 IAC 2-2 and 326 IAC 8-1-6 not applicable. Compliance with the source-wide production limit will ensure compliance for units EU-6, EU-7, EU-8, EU-9, EU-11, EU-12, EU-13, and from propane combustion. The total amount of VOC used by EU-28 and EU-29 is limited, as indicated, to ensure compliance.

County Attainment Status

The source is located in Hamilton County.

Pollutant	Status
PM-10	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Hamilton County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration).

(b) Hamilton County has been classified as attainment or unclassifiable for PM-10, SO_2, NO_2, CO, and lead. Therefore, these emissions were reviewed pursuant to the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration).

(c) Fugitive Emissions
Since this type of operation is one of the twenty-eight (28) listed source categories (a secondary metal production plant) under 326 IAC 2-2, the fugitive emissions are counted toward determination of PSD applicability.

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

(a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.

(b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.

(1) 40 CFR Part 60 Subpart AA (Standards of Performance for Steel Plants: Electric Arc Furnaces) does not apply to this source because it is not a steel plant with electric arc furnaces or dust handling equipment as defined in 40 CFR 60.271.

(2) 40 CFR Part 60 Subpart Z (Standards of Performance for Ferroalloy Production Facilities) does not apply to this source because the source does not use electric submerged arc furnaces as defined in 40 CFR 60.261.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

(c) The requirements of Section 112(j) of the Clean Air Act (40 CFR Part 63.50 through 63.56) are not applicable to this source because the source is not a major source of HAPs (i.e., the source does not have the potential to emit (after compliance with the applicable production limits) 10 tons per year or greater of a single HAP or 25 tons per year or greater of a combination of HAPs).

(d) This source is subject to the provisions of 40 CFR 64, Compliance Assurance Monitoring. In order for this rule to apply, a pollutant specific emissions unit at a Part 70 or Part 71 source must meet three criteria for a given pollutant: 1) the unit is subject to an emission limitation or standard for the applicable regulated air pollutant, 2) the unit uses a control device to achieve compliance with any such emission limitation or standard, and, 3) the unit has potential pre-control or post-control device emissions of the applicable regulated air pollutant that are equal or greater than 100 percent of the

amount required for a source to be classifies as a major source. Facilities EU-30 and EU-31 (Tumbleblast cleaning operations) are subject to emission limitations, use a baghouse for PM control, and each have a pre-control potential to emit PM greater than 100 tons per year and a post-control potential to emit PM less than 100 tons per year. However, the Part 70 application was submitted prior to April 20, 1998, and pursuant to 40 CFR 64.5, 40 CFR Part 64 applicability for facilities EU-30 and EU-31 will not be evaluated until such time that the Part 70 permit must be renewed.

State Rule Applicability - Entire Source

326 IAC 1-6-3 (Preventive Maintenance Plan)

The source submitted a Preventive Maintenance Plan (PMP) on August 1, 2000.

326 IAC 2-2 (Prevention of Significant Deterioration)

The source was constructed in the early 1960s and it is included in one of the 28 source categories. It has been an existing major PSD source since the promulgation of PSD rules in 1977.

Under the ownership of Noblesville Castings, the source submitted the first application for construction of two planned construction permits on April 13, 1998. On September 10, 1998, the OAQ issued CP 057-9664-00002 relating to the construction and operation of two (2) 10.2 ton per hour electric induction furnaces (EU-3A and EU-3B), one (1) reactivated Schneible medium to heavy load wet collector WC-W, and the removal of two (2) 2.5 ton per hour electric induction furnaces (EU-4 and EU-5). The metal processed by the source was limited to 11,960 tons per year, equivalent to 996.6 tons per month, of fifty percent (50%) steel scrap and fifty percent (50%) ductile iron re-melt in order to render the requirements of PSD not applicable to the modification. Netting credit for the actual emissions from the removal of the two (2) 2.5 ton per hour electric induction furnaces (EU-4 and EU-5) was used to render the requirements of PSD not applicable to the modification. The following table presents a summary of the netting analysis completed for CP 057-9664-00002:

Pollutant	PM	PM_{10}	SO_2	VOC	CO	NO_x
PTE of Modification (addition of EU-3A, EU-3B, and WC-W):	27.2	22.3	0.13	12.1	0.335	0.847
Credited Actual Emissions (removal of EU-4 and EU-5):	9.64	7.69	0.03	2.82	0.07	0.29
Net Change in Emissions	**17.6**	**14.6**	**0.095**	**9.28**	**0.265**	**0.557**
PSD Significance Level	25	15	40	40	100	40

On October 20, 1999, the OAQ issued significant source modification SSM 057-10672-00002 for: the removal of one (1) cupola (EU-1), the conversion and startup of one (1) 2.5 ton per hour electric induction furnace (EU-5) to a 2.5 ton per hour electric holding furnace (still identified as EU-5; this unit had been shut down per CP 057-9664-00002), the addition of emission controls (tundish ladle lids) on the magnesium treatment operation (EU-6), and an increase in the source's metal throughput limit to 35,400 tons per year of fifty percent (50%) steel scrap and fifty percent (50%) ductile iron re-melt. Emissions from the shut down of furnace EU-5 were used in the netting analysis completed in CP 057-9664-00002. Therefore, the emissions from the planned conversion, startup and operation of furnace EU-5 were included in the PTE of the proposed modification, SSM 057-10672-00002. (Note that EU-5 was shut down after the issuance of CP 057-9664-00002 and never converted as planned in SSM 057-10672-00002. Also note that EU-5 has since been removed from the source.) Netting credit for the actual emissions from the removal of the cupola (EU-1) was used to render the requirements of PSD not applicable to the modification. The source was also able to increase the source-wide

production limit without triggering PSD. The following table presents a summary of the netting analysis completed for SSM 057-10672-00002:

Pollutant	PM	PM_{10}	SO_2	VOC	CO	NO_x
PTE of Modification (conversion of EU-5, new controls on EU-6, and an increase in the source-wide production limit):	105	81.2	0.5	24.9	2.08	2.87
Credited Actual Emissions (removal of EU-1):	122	97.4	11.3	20.3	1855	3.19
Net Change in Emissions	**-17.0**	**-16.2**	**-10.8**	**4.6**	**-1853**	**-0.32**
PSD Significance Level	25	15	40	40	100	40

Pursuant to SSM 057-10672-00002, issued October 20, 1999:

(a) The fifty percent (50%) steel scrap and fifty percent (50%) ductile iron re-melt delivered to the two (2) 10.2 ton per hour electric induction furnaces and their associated operations (scrap and charge handling and heating, inoculation, holding, pouring casting, casting cooling, shakeout, sand grinding and handling, tumbleblast cleaning, casting grinding and finishing, core manufacture and sand handling) shall be limited to 35,400 tons per twelve consecutive month period with compliance determined at the end of each month. This limit is equivalent to:

(1) PM emissions of 24.0 pounds per hour,

(2) PM_{10} emissions of 18.5 pounds per hour,

(3) VOC emissions of 5.68 pounds per hour, and

(4) NO_x emissions of 0.605 pounds per hour.

(b) The two and one-half (2.5) ton per hour electric holding furnace, identified as EU-5, shall only be used for holding the melted fifty percent (50%) steel scrap and fifty percent (50%) ductile iron re-melt delivered from the two (2) 10.2 ton per hour electric induction furnaces, known as EU-3A and EU-3B.

On October 11, 2000, the OAQ issued amendment A057-12319-00002 to document the transfer of ownership of the source from Noblesville Castings, LLC to Indiana Ductile, LLC.

On August 16, 2002, Indiana Ductile informed the OAQ that they had no plans, at that time, to construct electric induction furnace EU-3B and electric holding furnace EU-5, and have removed cupola EU-1 and electric induction furnace EU-4. The 35,400 ton limit is still applicable because the one (1) 10.2 induction furnace (EU-3A) has the capacity to produce greater than 35,400 tons of metal per twelve consecutive month period. Shortly thereafter, IDEM determined that the PM emission factors used in the netting analysis from SSM 057-10672-00002, issued October 20, 1999 did not reflect those provided in AP-42. See the Existing Approvals section of this document for more information. As a result, the PSD minor modification limit from SSM 057-10672-00002 has been revised by this Part 70 permit as follows:

> Pursuant to SSM 057-10672-00002, issued October 20, 1999, the steel scrap and ductile iron re-melt delivered to the electric induction furnace (EU-3A) and its associated operations (scrap and charge handling and heating, inoculation, holding, pouring casting, casting cooling, shakeout, sand grinding and handling, tumbleblast cleaning, casting grinding and finishing, core manufacture and sand handling) shall not exceed 27,900 tons per twelve consecutive month period with compliance determined at the end of each month and the limits in the following table:

Stack (#): Process/facility (ID)	PM (lb/ton)	PM_{10} (lb/ton)
Stack 001: Scrap and Charge Handling and Heating (EU-2); Electric Induction Furnace (EU-3A); Magnesium Treatment/ Inoculation (EU-6); Core Manufacturing and Handling (EU-28 and EU-29)	2.05	1.72
Stack 003: Pouring/Casting Machine (EU-9); Sand Grinding and Handling (EU-17, EU-18, EU-19, EU-20, EU-23, EU-26, EU-27)	7.07	1.79
Stack 004: Pouring/Casting Machines (EU-7, EU-8); Casting/Cooling Lines (EU-7A, EU-8A, and EU-9A); Shake-out Units (EU-11, EU-12, and EU-13); Sand Grinding and Handling (EU-16);	8.16	2.77
Stack 006: Tumbleblast Cleaning (EU-30 and EU-31); Casting, Grinding, and Finishing (EU-32 and EU-33)	0.28	0.029
Stack 007: Sand Grinding and Handling (EU-22)	5.65	0.84

Compliance with these limits will render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

To ensure that the revised steel scrap and ductile iron re-melt production limit, included in this permit, does not result in emissions above the appropriate PSD thresholds, the netting analysis from SSM 057-10672-00002, issued October 20, 1999, was revised, as follows:

Pollutant	PM	PM_{10}	SO_2	VOC	CO	NO_x
Revised PTE to account for revised production limit	146.8	63.4	0.29	23.07	1.89	2.39
Credited Actual Emissions (from SSM 10672):	122	97.4	11.3	20.3	1855	3.19
Net Change in Emissions	**24.8**	**-34.0**	**-11.1**	**2.77**	**-1853**	**-0.8**
PSD Significance Level	25	15	40	40	100	40

SSM 057-10672-00002, issued October 20, 1999, did not directly limit the propane usage to ensure compliance with the NO_x and VOC portion of the PSD limit. As a result, the following limit has been added to ensure compliance with the existing PSD limits:

The total amount of propane used at the source shall not exceed forty-five (45.0) million standard cubic feet (MMSCF) per twelve consecutive month period with compliance determined at the end of each month. Compliance with this limit is equivalent to NOx and VOC emissions of 2.25 and 0.12 tons per year, respectively.

326 IAC 2-4.1 (Hazardous Air Pollutants)

All of the facilities, and processes, located at this source have the potential to emit any single HAP less than ten (10) tons per year and any combination of HAPs less than twenty-five (25)

tons per year. Therefore, the requirements of 326 IAC 2-4.1 are not applicable to this source or any of the facilities located therein.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of PM-10. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1st of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-4 (Fugitive Dust Emissions)

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)

This source is not located in a county listed in 326 IAC 6-5-1(a) and has not added a facility with the potential to emit fugitive particulate matter greater than 25 tons per year, which requires a permit as set forth in 326 IAC 2, after December 13, 1985. Therefore, pursuant to 326 IAC 6-5-1, this source is not subject to the requirements of 326 IAC 6-5.

326 IAC 9 (Carbon Monoxide Emission Limits)

Pursuant to 326 IAC 9 (Carbon Monoxide Emission Limits), the source is subject to this rule because it is a stationary source which emits CO emissions and commenced operation after March 21, 1972. However, under this rule, there are no specific CO emission limitations because the source is not an operation listed under 326 IAC 9-1-2.

State Rule Applicability - Individual Facilities

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from:

(a) The one (1) scrap and charge handling and heating operation, identified as EU-2, shall not exceed 19.4 pounds per hour when operating at a process weight rate of 10.2 tons per hour.

(b) The one (1) 10.2 ton per hour electric induction furnace, identified as EU-3A, shall not exceed 19.4 pounds per hour, when operating at a process weight rate of 10.2 tons per hour.

(c) The one (1) magnesium treatment/inoculation operation, identified as EU-6, shall not exceed 19.4 pounds per hour when operating at a process weight rate of 10.2 tons per hour.

(d) The three (3) pouring/casting machines, identified as EU-7, EU-8 and EU-9, shall not exceed 50.5 pounds per hour, each, when operating at a process weight rate of 42.4 tons per hour, each.

(e) The three (3) casting/cooling lines, identified as EU-7A, EU-8A and EU-9A, shall not exceed 50.5 pounds per hour, each, when operating at a process weight rate of 42.4 tons per hour, each.

(f) The three (3) shake-out units, identified as EU-11, EU-12 and EU-13, shall not exceed 50.5 pounds per hour, each, when operating at a process weight rate of 42.4 tons per hour, each.

(g) The core manufacturing operations, identified as EU-28 and EU-29, exhausting to stack 001, shall not exceed 3.65 pounds per hour, total, when operating at a process weight rate of 0.84 tons per hour of cores manufactured, total.

(h) The tumbleblast cleaning operations, identified as EU-30 and EU-31 shall not exceed 31.1 pounds per hour, total, when operating at a process weight rate of 20.6 tons per hour, total.

(i) The casting grinding and finishing operations, identified as EU-32 and EU-33 shall not exceed 13.0 pounds per hour, total, when operating at a process weight rate of 5.6 tons per hour, total.

The pounds per hour limitations were calculated with the following equations:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

(j) The sand grinding and handling operations, identified as EU-16 through EU-20 and EU-22 through EU-27, shall not exceed 46.3 pounds per hour, total, when operating at a total process weight rate of 60.2 tons per hour, total.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

Pursuant to 40 CFR 52 Subpart P, any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and pursuant to 326 IAC 6-3-2(e), any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and to which the provisions of 326 IAC 6-3-2(b) through (d) do not apply, the allowable particulate emission rate from the insignificant brazing, cutting, soldering, welding, and structural steel and bridge fabrication activities shall not exceed 0.551 pounds per hour for a process weight rate of less than 100 pounds per hour.

326 IAC 7-1.1-2 (Sulfur Dioxide Limitations)

None of the facilities at this source have the potential to emit sulfur dioxide greater than 25 tons per year. Therefore, the requirements of 326 IAC 7-1.1-2 do not apply to any of the facilities located at this source.

326 IAC 8-1-6 (Best Available Control Technology)

The shake-out operations (EU-11, EU-12 and EU-13) have the potential to emit more than 25 tons VOC per year. However, pursuant to SSM 057-10672-00002, issued October 20, 1999, the shake-out operations are limited to 27,900 tons metal per twelve consecutive month period, equivalent to 16.7 tons VOC per year. (See State Rule Applicability - 326 IAC 2-2 for more information.) Therefore, the requirements of 326 IAC 8-1-6 do not apply to the shake-out operations (EU-11, EU-12 and EU-13).

In order to render the requirements of 326 IAC 8-1-6 not applicable to the modification completed pursuant to SSM 057-10672-00002, issued October 20, 1999, the:

(a) VOC emissions from the following facilities are limited, as indicated below:

Stack (#): Process/facility (ID)	VOC (lb/ton metal)
Stack 003: Pouring/Casting Machines (EU-9)	0.14
Stack 004: Pouring/Casting Machines (EU-7, EU-8); and Shake-out Units (EU-11, EU-12, and EU-13)	1.34

(b) Total amount of VOC in the binder and catalyst used by the core manufacturing operations (EU-28 and EU-29) shall not exceed 6.1 tons per twelve consecutive month period with compliance determined at the end of each month. This limit, in conjunction with the VOC emission limits above and the source-wide production limit, is equivalent to total VOC emissions (from the entire source) of less than 25.0 tons per year.

Compliance with these limits will render the requirements of 326 IAC 8-1-6 (BACT) not applicable to the modification completed pursuant to SSM 057-10672-00002, issued October 20, 1999.

Testing Requirements

PM and PM10 are the major pollutants emitted from this source. Pursuant to SSM 057-10672-00002, issued October 20, 1999, the source has to complete the following testing:

(a) Within one hundred and eighty (180) days after issuance of this Part 70 permit, the Permittee shall perform PM and PM_{10} testing for two (2) casting machines (EU-7 and EU-8), the three (3) cooling lines (EU-7A, EU-8A and EU-9A), three (3) shakeout units (EU-11, EU-12 and EU-13), and one (1) casting vibrating conveyor (EU-16), all exhausting through wet collector WC-E (stack 004) utilizing methods as approved by the Commissioner. The respective facilities shall process 100% ductile iron remelt during the tests. This test shall be repeated at least once every five (5) years from the date of valid compliance demonstration. PM_{10} includes filterable and condensible PM_{10}.

(b) Within one hundred and eighty (180) days after issuance of this Part 70 permit, the Permittee shall perform PM and PM_{10} testing for the one (1) casting machine (EU-9), one (1) muller (EU-17), the return sand screens (EU-18), one (1) return sand conveyor system (EU-27) and the four (4) storage bins (EU-19, EU-20, EU-23 and EU-26), all exhausting through wet collector WC-W (stack 003) utilizing methods as approved by the Commissioner. The respective facilities shall process 100% ductile iron remelt during the tests. This test shall be repeated at least once every five (5) years from the date of valid compliance demonstration. PM_{10} includes filterable and condensible PM_{10}.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

1. The ductile iron production operations have the following applicable compliance monitoring conditions:

   (a) Visible emission notations of exhaust from stacks 001, 003, 004, 006, and 007 shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

   (b) An inspection shall be performed each calender quarter of all tundish ladle lids controlling the one (1) magnesium treatment/inoculation operation, identified as EU-6. A tundish ladle lid inspection shall be performed within three months of installation and every three months thereafter. Inspections shall not be performed in consecutive months. All defective tundish ladle lids and defective tundish ladle lid parts shall be replaced.

   (c) In the event that tundish ladle lid failure has been observed.

   The effected unit, identified as EU-6, will be shut down immediately until the failed tundish ladle lid units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8)

hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(d) The Permittee shall record the total static pressure drop across the wet collectors used in conjunction with the three (3) casting machines, identified as EU-7, EU-8 and EU-9, three (3) cooling lines, identified as EU-7A, EU-8A and EU-9A, and three (3) shake-out units, identified as EU-11, EU-12, and EU-13, the one (1) vibrating casting conveyor, identified as EU-16, one (1) muller, identified as EU-17, return sand screens, identified as EU-18, one (1) return sand conveyor system, identified as EU-27, two (2) return sand storage bins, identified as EU-19 and EU-20, one (1) bond storage bin, identified as EU-23, and one (1) sand storage bin, identified as EU-26, at least once per shift when the casting, cooling, shake out, sand grinding and handling processes are in operation. When for any one reading, the pressure drop across the wet collector is outside the normal range of 3.0 to 5.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit. The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

(e) An inspection shall be performed each calender quarter of all wet collectors controlling the three (3) casting machines, identified as EU-7, EU-8 and EU-9, three (3) cooling lines, identified as EU-7A, EU-8A and EU-9A, and three (3) shake-out units, identified as EU-11, EU-12, and EU-13, the one (1) vibrating casting conveyor, identified as EU-16, one (1) muller, identified as EU-17, return sand screens, identified as EU-18, one (1) return sand conveyor system, identified as EU-27, two (2) return sand storage bins, identified as EU-19 and EU-20, one (1) bond storage bin, identified as EU-23, and one (1) sand storage bin, identified as EU-26. Inspections shall not be performed in consecutive months. All defective or failed wet collector parts shall be replaced.

(f) In the event that wet collector failure has been observed.

The effected units, identified as EU-7, EU-8, EU-9, EU-7A, EU-8A, EU-9A, EU-11, EU-12, and EU-13, EU-16, EU-17, EU-18, EU-19, EU-20, EU-23, EU-26, and EU-27, will be shut down immediately until the failed wet collector units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(g) The Permittee shall record the total static pressure drop across the baghouses, identified as BH-1 and BH-2, used in conjunction with the bond storage bin, identified as EU-22, two (2) shot blast machines, identified as EU-30 and EU-31,

ten (10) grinding units, identified as EU-32, and ten (10) finishing (air burr) units, identified as EU-33, at least once per shift when the bond storage bin, identified as EU-22, two (2) shot blast machines, identified as EU-30 and EU-31, ten (10) grinding units, identified as EU-32, and ten (10) finishing (air burr) units, identified as EU-33, are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 and 4.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(h) The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

(i) An inspection shall be performed each calender quarter of all bags controlling the bond storage bin, identified as EU-22, two (2) shot blast machines, identified as EU-30 and EU-31, ten (10) grinding units, identified as EU-32, and ten (10) finishing (air burr) units, identified as EU-33. Inspections shall not be performed in consecutive months. All defective bags shall be replaced.

(j) In the event that bag failure has been observed:

For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

These monitoring conditions are necessary because the baghouses, wet collectors, and tundish ladle lids must operate properly to ensure compliance with 326 IAC 5-1 and 326 IAC 2-7 (Part 70) and in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

Conclusion

The operation of this ductile iron and steel foundry shall be subject to the conditions of the attached proposed Part 70 Permit No. T057-13975-00002.

Appendix A: Potential and Limited Emission Calculations
Iron and Steel Foundry

Company Name: Indiana Ductile, LLC
Address City IN Zip: 1600 South 8th Street, Noblesville, IN 46060
Permit #: T057-13975-00002
Reviewer: ERG/BS
Date: April 22, 2002

Iron Process	Potential Throughput metal (tons/hr)	PM Control (%)	**Limited Throughput (tons/yr)**
Scrap & Charge Handling and Heating (EU-2)	10.2	0.0%	27900

	PM	PM10	Allowable PM 326 IAC 6-3-2
Emission Factors (lbs/ton produced)	0.600	0.360	
Potential Emissions (lbs/hr)	6.1	3.67	19.4
Potential Emissions (tons/yr)	26.8	16.1	
Limited Emissions with throughput limit and cont (tons/yr)	8.4	5.02	

Potential Throughput is equal to the maximum capacity of the electric induction furnace (EU-3A).
Pursuant to SSM 057-10672-00002, and revised by this permit, the Scrap & Charge Handling & Heating operations (EU-2) are limited as indicated.
PM emission factor for Scrap and Charge Handling and Heating is from AP-42 Ch. 12.10 (Iron Foundries)
PM10 emission factor for Scrap and Charge Handling and Heating is from AP-42 Ch. 12.13 (Steel Foundries)

Iron Process	Potential Throughput metal (tons/hr)	PM Control (%)	Limited Throughput (tons/yr)
One (1) Electric Induction Furnace (EU- 3A)	10.2	0.0%	27900

	PM	PM10	Allowable PM 326 IAC 6-3-2*
Emission Factors (lbs/ton produced)	0.900	0.860	
Potential Emissions (lbs/hr)	9.2	8.8	19.4
Potential Emissions (tons/yr)	40.2	38.4	
Limited Emissions with throughput limit and cont (tons/yr)	12.6	12.0	

Pursuant to SSM 057-10672-00002, and revised by this permit, the Electric Induction Furnace (EU-3A) is limited as indicated.
PM emission factor for Electric Induction Furnace is from AP-42 Ch. 12.10 (Iron Foundries)
PM10 emission factor for Electric Induction Furnaces is from the AIRS Facility Subsystyem Emission Factor Listing For Criteria Air Pollutants.

Methodology:
Potential Emissions (ton/yr) = Potential Throughput (ton/hr) x Emission Factor (lb pollutant/ton) x 8760 hr/yr x 1/2000 ton/lb
Limited Emissions (ton/yr) = Limited Throughput (ton/hr) x Emission Factor (lb pollutant/ton) x 8760 hr/yr x 1/2000 ton/lb x (1-control efficiency)

Appendix A: Potential and Limited Emission Calculations
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Permit #: T057-13975-00002
Reviewer: ERG/BS
Date: April 22, 2002

Iron Process	Potential Throughput metal (tons/hr)		PM Control** (%)	Limited Throughput (tons/yr)
Magnesium Treatment (Inoculation) (EU-6)	10.2	total	70.0%	27900

	PM	PM10	VOC	Allowable PM 326 IAC 6-3-2
Emission Factors lbs/ton produced	1.80	1.62	0.005	
Potential Emissions (lbs/hr)	18.4	16.5	0.051	19.4
Potential Emissions (tons/yr)	80	72	0.223	
Limited Emissions with throughput limit and cont (tons/yr)	7.53	6.78	0.070	

Potential Throughput is equal to the maximum capacity of the electric induction furnace (EU-3A).
Pursuant to SSM 057-10672-00002, and revised by this permit, the Magnesium Treatment operations (EU-6) are limited as indicated.
**The Ohio EPA estimates a 70% overall PM (including heavy metals) control efficiency for enclosed transfer operations (i.e. Tundish ladle lids) (consistent with SSM 057-10672-00002).
PM emission factor for Magnesium Treatment (Inoculation) is from AP-42 Ch. 12.10 (Iron Foundries).
PM10 and VOC emission factors for Magnesium Treatment (Inoculation) is from AIRS Facility Subsystyem Emission Factor Listing For Criteria Air Pollutants.

Iron Process	Potential Throughput metal (tons/hr)		PM Control** (%)	Limited Throughput (tons/yr)
Pouring/Casting (EU-7, EU-8, and EU-9)	10.2	total	66.2% (67.5% capture x 98% collection)	27900

	PM	PM10	SO2	NOx	VOC	Allowable PM 326 IAC 6-3-2
Emission Factors (lbs/ton produced)	4.20	2.80	0.02	0.01	0.140	
Potential Emissions (lbs/hr)	42.8	28.6	0.204	0.102	1.43	50.48
Potential Emissions (tons/yr)	188	125	0.894	0.447	6.3	
Limited Emissions with throughput limit and cont (tons/yr)	19.8	13.2	0.279	0.140	1.953	

* The process weight rate used to calculate the 326 IAC 6-3-2 limit is equal to 42.4 tons/hr.
** The PM emissions (including heavy metals) from facilities EU-7, EU-8, and EU-9 are controlled by wet collectors with 67.5% capture and 98% collection efficiencies (consistent with SSM 057-10672-00002).
EU-7 and EU-8 are controlled by WC-E which exhausts to stack 004; EU-9 is controlled by WC-W which exhausts to stack 003.
Potential Throughput is equal to the maximum capacity of the electric induction furnace (EU-3A).
Pursuant to SSM 057-10672-00002, and revised by this permit, the Pouring/Casting operations (EU-7, EU-8, and EU-9) are limited as indicated (in aggregate).
PM emission factor for Pouring/Casting is from AP-42 Ch. 12.10 (Iron Foundries).
PM10 emission factor for Pouring/Casting is from AP-42 Ch. 12.13 (Steel Foundries).
Pouring/Casting SO2, NOx, and VOC emission factors were supplied by the AIRS Facility Subsystem Emission Factor Listing For Criteria Air Pollutants.

Methodology:
PM capture is based on the best engineering judgement of hood capture ability.
Potential Emissions (ton/yr) = Potential Throughput (ton/hr) x Emission Factor (lb pollutant/ton) x 8760 hr/yr x 1/2000 ton/lb
Limited Emissions (ton/yr) = Limited Throughput (ton/hr) x Emission Factor (lb pollutant/ton) x 8760 hr/yr x 1/2000 ton/lb x (1-control efficiency)

Appendix A: Potential and Limited Emission Calculations
Iron and Steel Foundry

Company Name: Indiana Ductile, LLC
Address City IN Zip: 1600 South 8th Street, Noblesville, IN 46060
Permit #: T057-13975-00002
Reviewer: ERG/BS
Date: April 22, 2002

Iron Process	Potential Throughput metal (tons/hr)		PM Control** (%)	Limited Throughput (tons/yr)
Casting/Cooling (EU-7A, EU-8A, and EU-9A)	10.2	total	49.0%	27900
			(50% capture x 98% collection)	

	PM	PM10	Allowable PM 326 IAC 6-3-2 *
Emission Factors lbs/ton produced	1.40	1.40	
Potential Emissions (lbs/hr)	14.3	14.3	50.48
Potential Emissions (tons/yr)	63	63	
Limited Emissions with throughput limit and cont (tons/yr)	10.0	10.0	

* The process weight rate used to calculate the 326 IAC 6-3-2 limit is equal to 42.4 tons/hr.
** Emissions from EU-7A, EU-8A, and EU-9A are vented to stack 005, but an estimated 50% of the emissions are captured by the hoods for wet collectors WC-E and WC-W (consistent with SSM 057-10672-00002).
Potential Throughput is equal to the maximum capacity of the electric induction furnace (EU-3A).
Pursuant to SSM 057-10672-00002, and revised by this permit, the Casting/Cooling operations (EU-7A, EU-8A, and EU-9A) are limited as indicated.
PM/PM10 emission factor for Casting/Cooling is from AP-42 Ch. 12.13 (Steel Foundries).

Iron Process	Potential Throughput metal (tons/hr)		PM Control** (%)	Limited Throughput (tons/yr)
Shakeout (EU-11, EU-12, EU-13)	10.2	total	88.2%	27900
			(90% capture x 98% collection)	

	PM	PM10	VOC	Allowable PM 326 IAC 6-3-2
Emission Factors lbs/ton produced	3.20	2.24	1.20	
Potential Emissions (lbs/hr)	32.6	22.8	12.2	50.48
Potential Emissions (tons/yr)	143	100	54	
Limited Emissions with throughput limit and cont (tons/yr)	5.27	3.69	16.74	

* The process weight rate used to calculate the 326 IAC 6-3-2 limit is equal to 42.4 tons/hr.
** The PM emissions (including heavy metals) from facilities EU-11, EU-12, and EU-13 are controlled by wet collectors with 90% capture and 98% collection efficiencies.
Potential Throughput is equal to the maximum capacity of the electric induction furnace (EU-3A).
Pursuant to SSM 057-10672-00002, the Shakeout operations (EU-11, EU-12, and EU-13) are limited to 35,400 tons per year.
PM emission factor for Shakeout is from AP-42 Ch. 12.10 (Iron Foundries).
PM10 and VOC emission factors for Shakeout are from the AIRS Facility Subsystem Emission Factor Listing for Criteria Air Pollutants.

Methodology:
PM capture is based on the best engineering judgement of hood capture ability.
Potential Emissions (ton/yr) = Potential Throughput (ton/hr) x Emission Factor (lb pollutant/ton) x 8760 hr/yr x 1/2000 ton/lb
Limited Emissions (ton/yr) = Limited Throughput (ton/hr) x Emission Factor (lb pollutant/ton) x 8760 hr/yr x 1/2000 ton/lb x (1-control efficiency)

Appendix A: Potential and Limited Emission Calculations
Iron and Steel Foundry

Company Name: Indiana Ductile, LLC
Address City IN Zip: 1600 South 8th Street, Noblesville, IN 46060
Permit #: 057-13975-00002
Reviewer: ERG/BS
Date: April 22, 2002

Iron Process	Potential Throughput sand (tons/hr)		PM Control** (%)	Equivalent Limited Throughput (tons/yr)
Sand Grinding and Handling (EU-16-EU20, EU22-EU-27)	50.0	total	68.6% (70% capture x 98% collection)	139500

	PM	PM10	Allowable PM 326 IAC 6-3-2 *
Emission Factors lbs/ton sand handled	3.6	0.54	
Potential Emissions (lbs/hr)	180.0	27.0	46.3 (total)
Potential Emissions (tons/yr)	788	118	
Limited Emissions with throughput limit and cont (tons/yr)	78.8	11.8	

* The process weight rate used to calculate the 326 IAC 6-3-2 limit is equal to 60.2 tons/hr.
**EU-16 is controlled by wet collector WC-E which exhausts to stack 004.
**EU-17, EU-18, EU-19, EU-20, EU-23, EU-26, and EU-27 are controlled by wet collector WC-W which exhausts to stack 003.
**EU-22 is controlled by baghouse BH-2 which exhausts to stack 007.
**EU-30 and EU-31 are controlled by baghouse BH-1 which exhausts to stack 006.
The efficiencies of the control devices used in conjunction with the Sand Grinding and Handling operations are: 70% capture and 98% collection.
Potential Throughput (Sand Grinding and Handling) = potential throughput metal (10.2 tons/hr) x 5 (5 tons sand needed per ton of metal processed; per source) = 51 tons
Limited Throughput (Sand Grinding and Handling) = limited throughput metal (tpy) x 5 (5 tons sand needed per ton of metal processed; per source)
PM emission factor for Sand Grinding and Handling is from AP-42 Ch. 12.10 (Iron Foundries)
PM10 emission factor for Sand Grinding and Handling is from AP-42 Ch. 12.13 (Steel Foundries)

Iron Process	Potential Throughput castings (tons/hr)		PM Control** (%)	Equivalent Limited Throughput (tons/yr)
Tumbleblast Cleaning (EU-30 and EU-31)	5.6	total	97.0% (99% capture x 98% collection)	15345

	PM	PM10	Allowable PM 326 IAC 6-3-2 *
Emission Factors lbs/ton finished casting	17.0	1.7	
Potential Emissions (lbs/hr)	95	9.5	31.1 (total)
Potential Emissions (tons/yr)	417	41.7	
Limited Emissions with throughput limit and cont (tons/yr)	3.91	0.39	

* The process weight rate used to calculate the 326 IAC 6-3-2 limit is equal to 20.6 tons/hr.
** Facilities EU-30 and EU-31 are controlled by baghouse BH-1 with 99% capture and 98% collection efficiencies.
Potential Throughput (Tumbleblast Cleaning)= potential throughput metal (10.2 tons/hr) x 55% (0.55 tons castings per ton of metal processed; per source) = 5.6 tons
Limited Throughput (Tumbleblast Cleaning) = limited throughput metal (tpy) x 55% (0.55 tons castings per ton of metal processed; per source)
PM emission factor for Tumbleblast Cleaning is from AP-42 Ch. 12.10 (Iron Foundries).
PM10 emission factor for Tumbleblast Cleaning is from AP-42 Ch. 12.13 (Steel Foundries).

Methodology:
PM capture is based on the best engineering judgement of hood capture ability.
Potential Emissions (ton/yr) = Potential Throughput (ton/hr) x Emission Factor (lb pollutant/ton) x 8760 hr/yr x 1/2000 ton/lb
Limited Emissions (ton/yr) = Limited Throughput (ton/hr) x Emission Factor (lb pollutant/ton) x 8760 hr/yr x 1/2000 ton/lb x (1-control efficiency)

Appendix A: Potential and Limited Emission Calculations
Iron and Steel Foundry

Company Name: Indiana Ductile, LLC
Address City IN Zip: 1600 South 8th Street, Noblesville, IN 46060
Permit #: 057-13975-00002
Reviewer: ERG/BS
Date: April 22, 2002

Iron Process	Potential Throughput castings (tons/hr)		PM Control** (%)	Equivalent Limited Throughput (tons/yr)
Casting/Grinding/Finishing (EU-32 and EU-33)	5.6	total	97.0% (99% capture x 98% collection)	15345

	PM	PM10	Allowable PM 326 IAC 6-3-2 *
Emission Factors lbs/ton finished casting	0.01	0.0045	
Potential Emissions (lbs/hr)	0.0560	0.0252	13.0 (total)
Potential Emissions (tons/yr)	0.245	0.110	
Limited Emissions with throughput limit and cont (tons/yr)	0.00230	0.00104	

** PM (including heavy metals) emissions from facilities EU-32 and EU-33 are controlled by baghouse BH-1 with 99% capture and 98% collection efficiencies.
* The process weight rate used to calculate the 326 IAC 6-3-2 limit is equal to 5.6 tons/hr.
EU-32 and EU-33 are controlled by baghouse BH-1 which exhausts to stack 006.
Potential Throughput (Casting Grinding and Finishing) = potential throughput metal (10.2 tons/hr) x 55% (0.55 tons castings per ton of metal processed; per source) = 5.6 tons
Limited Throughput (Casting Grinding and Finishing) = limited throughput metal (tpy) x 55% (0.55 tons castings per ton of metal processed; per source)
PM and PM10 emission factors for Casting Grinding and Finishing are from AIRS Facility Subsystem Emission Factor Listing For Criteria Air Pollutants.

Iron Process	Potential Throughput cores (tons/hr)		PM Control** (%)	Equivalent Limited Throughput cores based on metal production limit (tons/yr)
Core Manufacture and Handling (EU-28 and EU-29)	0.84	total	70.0%	2293

	PM	PM10	VOC	Allowable PM 326 IAC 6-3-2 *
Emission Factors lbs/ton cores produced	1.00	0.89	51.30	
Potential Emissions (lbs/hr)	0.840	0.748	43.09	3.65 (total)
Potential Emissions (tons/yr)	3.68	3.27	188.74	
Limited Emissions with throughput limit and cont (tons/yr)	0.344	0.306	6.100 ***	

* The process weight rate, used to calculated the 326 IAC 6-3-2 limit, is equal to 0.84 tons/hr.
**The Ohio EPA estimates that buildings which enclose non-heated facilities act as a capture device with a 70% overall control for those facilities (consistent with SSM 057-10672-00002).
*** The total VOC used by EU-28 and EU-29 is limited to 6.1 tons per twelve consecutive month period.
Potential Throughput (Core Manufacture and Handling)= potential throughput metal (10.2 tons/hr) x 8.22% (0.0822 tons cores per ton of metal processed; per source) = 0.84 tons
Limited Throughput (Core Manufacture and Handling) (based on production limit)= limited production (ton/yr) x 8.22% (0.0822 tons cores per ton of metal processed; per source)
The core manufacturing process utilizes one of two methods of production: either the Isocure (Cold) or Shell (Hot) method. As a worst case estimate, these calculations assume that all cores are produced by the Shell (Hot) method. The estimated VOC emissions from the Shell (Hot) method are 1.3 lb/ton cores (from binder use) and 50 lb/ton cores (from catalyst use); for a total of 51.3 lb VOC per ton core produced. Emission factors are based on information provided by the source.
PM and PM10 emission factors for Core Manufacture and Handling are from AIRS Facility Subsystem Emission Factor Listing For Criteria Air Pollutants.

Methodology:
PM capture is based on the best engineering judgement of hood capture ability.
Potential Emissions (ton/yr) = Potential Throughput (ton/hr) x Emission Factor (lb pollutant/ton) x 8760 hr/yr x 1/2000 ton/lb
Limited Emissions (ton/yr) = Limited Throughput (ton/hr) x Emission Factor (lb pollutant/ton) x 8760 hr/yr x 1/2000 ton/lb x (1-control efficiency)

Appendix A: Potential and Limited Emission Calculations
Iron and Steel Foundry

Company Name: **Indiana Ductile, LLC**
Address City IN Zip: **1600 South 8th Street, Noblesville, IN 46060**
Permit #: **057-13975-00002**
Reviewer: **ERG/BS**
Date: **April 22, 2002**

Potential Heat Input Capacity (MMBtu/hr)	Potential Throughput (MMCF/yr)	Limited Throughput (MMCF/yr)
10.9	93.35	45.00

	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	7.60	7.60	0.600	100	5.50	84.0
Potential To Emit (ton/yr)	0.355	0.355	0.028	4.668	0.257	3.9
Limited Potential To Emit (ton/yr)	0.17	0.17	0.01	2.25	0.124	1.89

The source-wide capacity of 10.9 MMBtu/hr is from four 2.093 MMBtu/hr shell core machines, two 0.5 MMBtu/hr ladle lid heating torches, one 0.5 MMBtu/hr conveyor torch, and two 0.5 MMBtu/hr auto-pour torches.

Methodology:
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
It is assumed that the emissions from propane combustion are equivalent to emissions from natural gas combustion; emission factors from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3.

Emissions Summary

Company Name: Indiana Ductile, LLC
Address City IN Zip: 1600 South 8th Street, Noblesville, IN 46060
Permit #: T057-13975-00002
Reviewer: ERG/BS
Date: April 22, 2002

Process Description	Potential Potential Controlled Limited and Controlled	PM (tpy)	PM10 (tpy)	SO2 (tpy)	NOx (tpy)	VOC (tpy)	CO (tpy)
One (1) Electric Induction Furnace	Potential	40.2	38.4	0.00	0.00	0.00	0.00
	Limited	12.6	12.0	0.00	0.00	0.00	0.00
Scrap and Charge Handling	Potential	26.8	16.1	0.00	0.00	0.00	0.00
and Heating	Limited	8.4	5.02	0.00	0.00	0.00	0.00
Magnesium Treatment/Inoculation	Potential	80	72	0.00	0.00	0.223	0.00
	Potential Controlled	24.1	21.7	0.00	0.00	0.067	0.00
70.0% Controlled	Limited and Controlled	7.53	6.78	0.00	0.00	0.0698	0.00
Pouring Casting	Potential	188	125	0.89	0.447	6.3	0.00
	Potential Controlled	63	42.3	0.89	0.447	6.3	0.00
66.2% Controlled	Limited and Controlled	19.8	13.22	0.279	0.140	1.95	0.00
Casting Cooling	Potential	63	63	0.00	0.00	0.00	0.00
	Potential Controlled	31.9	31.9	0.00	0.00	0.00	0.00
49.0% Controlled	Limited and Controlled	10.0	9.96	0.00	0.00	0.00	0.00
Shakeout	Potential	143	100	0.00	0.00	53.61	0.00
	Potential Controlled	16.9	11.8	0.00	0.00	53.61	0.00
88.2% Controlled	Limited and Controlled	5.27	3.69	0.00	0.00	16.74	0.00
Sand Grinding and Handling	Potential	788	118	0.00	0.00	0.00	0.00
	Potential Controlled	247.6	37.1	0.00	0.00	0.00	0.00
68.6% Controlled	Limited and Controlled	78.8	11.8	0.00	0.00	0.00	0.00
Tumbleblast Cleaning	Potential	417	41.7	0.00	0.00	0.00	0.00
	Potential Controlled	12.5	0.83	0.00	0.00	0.00	0.00
97.0% Controlled	Limited and Controlled	3.91	0.391	0.00	0.00	0.00	0.00
Casting Grinding and Finishing	Potential	0.245	0.110	0.00	0.00	0.00	0.00
	Potential Controlled	0.00736	0.00220	0.00	0.00	0.00	0.00
97.0% Controlled	Limited and Controlled	0.00230	0.00104	0.00	0.00	0.00	0.00
Core Manufacture	Potential	3.68	3.27	0.00	0.00	188.74	0.00
	Potential Controlled	1.104	1.005	0.00	0.00	188.74	0.00
70.0% Controlled	Limited and Controlled	0.344	0.306	0.00	0.00	6.100	0.00
Propane Usage	Potential	0.355	0.355	0.028	4.7	0.257	3.9
	Limited	0.171	0.171	0.014	2.250	0.124	1.890
		PM	**PM10**	**SO2**	**NOx**	**VOC**	**CO**
TOTALS:	Potential	1750.23	578.29	0.92	5.11	249.09	3.92
	Potential Controlled	464.86	201.53	0.92	5.11	248.93	3.92
	Limited and Controlled	146.79	63.36	0.29	2.39	24.99	1.89

HAP Emission Calculations
From Binder Systems
for Ductile Iron and Steel Foundries

Company Name: **Indiana Ductile, LLC**
Address City IN Zip: **1600 South 8th Street, Noblesville, IN 46060**
Permit #: **T057-13975-00002**
Reviewer: **ERG/BS**
Date: **April 22, 2002**

Annual Usage of Index Material (lbs/yr)	Binder System
22800	Phen. Urethane

	Binder System Type Emission Factors => Lbs. of Chemical Released to Air per Lbs. of Index											***		
Pollutant	Phenolic Nobake (Resin)	**Phenolic Urethane (Resin)**	Phenilic Hotbox (Resin)	Green Sand (Seacoal)	Core Oil (Core Oil)	Shell (Resin)	Low Nitrogen Furan (Resin)	Med Nitrogen Furan TSA Catalyst (Resin)	Furan Hotbox (Resin)	Alkyd Isocyanate (Resin & Isocyanate)	Sodium Silicate & Ester (Sugar & Ester)	Estimated Actual Emissions (lbs/yr)	Estimated Potential to Emit (lbs/yr)	Estimated Potential to Emit (tons/yr)
Ammonia	0.000039	**0.000083**	0.010931	0.000065	0.000038	0.003860	0.000040	0.000202	0.019579	0.000037	0.000038	1.89	3.68	0.00184
Hydrogen Sulfide	0.001462	**0.000057**	0.000009	0.000832	0.000057	0.000094	0.000405	0.000486	0.000060	0.000007	0.000197	1.30	2.53	0.00126
Nitrogen Oxides	0.000029	**0.000044**	0.000638	0.000562	0.000081	0.000994	0.000012	0.000312	0.000411	0.000355	0.000028	1.00	1.95	0.000976
Sulfur Dioxide	0.015107	**0.000061**	0.000036	0.000253	0.000115	0.003509	0.000607	0.004858	0.000088	0.000040	0.000244	1.39	2.71	0.00135
Total Hydrocarbons	0.012159	**0.023377**	0.005165	0.011941	0.028737	0.022421	0.007814	0.017178	0.006259	0.035567	0.022782	533	1038	0.519
Acrolein	0.000005	**0.000031**	0.000009	0.000002	0.000077	0.000047	0.000028	0.000016	0.000013	0.000088	0.000028	0.707	1.38	0.000688
Benzene	0.011209	**0.005351**	0.001002	0.000611	0.002344	0.006667	0.000648	0.004534	0.000537	0.005336	0.001410	122	237	0.119
Formaldehyde	0.000010	**0.000022**	0.000006	0.000004	0.000096	0.000035	0.000267	0.000065	0.000009	0.000106	0.000169	0.502	0.976	0.000488
Hydrogen Cyanide	0.000029	**0.001053**	0.001184	0.000118	0.000086	0.010526	0.000368	0.000607	0.003474	0.000175	0.000179	24.0	46.7	0.0234
M-Xylene	0.000097	**0.000439**	0.000121	0.000021	0.000239	0.000585	0.002227	0.000243	0.000032	0.002522	0.000094	10.0	19.5	0.00974
Naphthalene	0.000049	**0.000022**	0.000030	0.000021	0.000048	0.000058	0.000040	0.000040	0.000032	0.000037	0.000005	0.502	0.976	0.000488
O-Xylene	0.000049	**0.000132**	0.000030	0.000021	0.000287	0.000117	0.000729	0.000040	0.000032	0.003838	0.000094	3.01	5.86	0.00293
Phenol	0.000975	**0.003904**	0.000203	0.000131	0.000057	0.002456	0.000024	0.000101	0.000016	0.000110	0.000273	89.0	173	0.0866
Toluene	0.000634	**0.000833**	0.000182	0.000063	0.000478	0.002807	0.000210	0.008826	0.000032	0.001535	0.000282	19.0	37.0	0.0185
Total Aromatic Amines	0.000049	**0.000351**	0.001275	0.000021	0.000096	0.002339	0.000081	0.000364	0.003032	0.000037	0.000094	8.00	15.6	0.00779
Total C2 to C5 Aldehydes	0.003070	**0.000219**	0.000273	0.000063	0.000766	0.000585	0.000243	0.017004	0.000158	0.002156	0.001316	4.99	9.72	0.00486
Total HAPs	0.016174	**0.012355**	0.004318	0.001076	0.004574	0.026222	0.004777	0.031842	0.007364	0.015939	0.003943	282	548	0.274

These emission calculations were reproduced from SSM 057-10672-00002, issued October 20, 1999.

Total State Potential Emissions

*** Note: Substitute appropriate column letter in formula

METHODOLOGY

Estimated Actual Emissions (tons/yr) = Annual Usage of Index (lbs/yr) * Emission Factor (lbs Chemical/lbs Index) * 1 ton/2000 lbs

Estimated Potential to Emit (tons/yr) = Estimated Actual Emissions (lbs/yr) x 8760/4500 (hr/yr yr/hr) x 1/2000 (ton/lb)

HAP Emission Calculations
Pouring-Cooling-Shakeout Binder Systems
for Grey Iron Foundries

Company Name: **Indiana Ductile, LLC**
Address City IN Zip: **1600 South 8th Street, Noblesville, IN 46060**
Permit #: **T057-13975-00002**
Reviewer: **ERG/BS**
Date: **April 22, 2002**

Annual Usage of Index Material (lbs/yr)	Binder System
63400	Shell

	Binder System Type Emission Factors => Lbs. of Chemical Released to Air per Lbs. of Index											***	***	
Pollutant	Phenolic Nobake (Resin)	Phenolic Urethane (Resin)	Phenilic Hotbox (Resin)	Green Sand (Seacoal)	Core Oil (Core Oil)	**Shell (Resin)**	Low Nitrogen Furan (Resin)	Med Nitrogen Furan TSA Catalyst (Resin)	Furan Hotbox (Resin)	Alkyd Isocyanate (Resin & Isocyanate)	Sodium Sili-cate & Ester (Sugar & Ester)	Estimated Actual Emissions (lbs/yr)	Estimated Potential to Emit (lbs/yr)	Estimated Potential to Emit (tons/yr)
Ammonia	0.000039	0.000083	0.010931	0.000065	0.000038	**0.003860**	0.000040	0.000202	0.019579	0.000037	0.000038	245	476	0.238
Hydrogen Sulfide	0.001462	0.000057	0.000009	0.000832	0.000057	**0.000094**	0.000405	0.000486	0.000060	0.000007	0.000197	5.96	11.6	0.00580
Nitrogen Oxides	0.000029	0.000044	0.000638	0.000562	0.000081	**0.000994**	0.000012	0.000312	0.000411	0.000355	0.000028	63.0	123	0.0613
Sulfur Dioxide	0.015107	0.000061	0.000036	0.000253	0.000115	**0.003509**	0.000607	0.004858	0.000088	0.000040	0.000244	222	433	0.217
Total Hydrocarbons	0.012159	0.023377	0.005165	0.011941	0.028737	**0.022421**	0.007814	0.017178	0.006259	0.035567	0.022782	1421	2767	1.384
Acrolein	0.000005	0.000031	0.000009	0.000002	0.000077	**0.000047**	0.000028	0.000016	0.000013	0.000088	0.000028	2.98	5.80	0.00290
Benzene	0.011209	0.005351	0.001002	0.000611	0.002344	**0.006667**	0.000648	0.004534	0.000537	0.005336	0.001410	423	823	0.411
Formaldehyde	0.000010	0.000022	0.000006	0.000004	0.000096	**0.000035**	0.000267	0.000065	0.000009	0.000106	0.000169	2.22	4.32	0.00216
Hydrogen Cyanide	0.000029	0.001053	0.001184	0.000118	0.000086	**0.010526**	0.000368	0.000607	0.003474	0.000175	0.000179	667	1299	0.650
M-Xylene	0.000097	0.000439	0.000121	0.000021	0.000239	**0.000585**	0.002227	0.000243	0.000032	0.002522	0.000094	37.1	72.2	0.0361
Naphthalene	0.000049	0.000022	0.000030	0.000021	0.000048	**0.000058**	0.000040	0.000040	0.000032	0.000037	0.000005	3.68	7.16	0.00358
O-Xylene	0.000049	0.000132	0.000030	0.000021	0.000287	**0.000117**	0.000729	0.000040	0.000032	0.003838	0.000094	7.42	14.4	0.00722
Phenol	0.000975	0.003904	0.000203	0.000131	0.000057	**0.002456**	0.000024	0.000101	0.000016	0.000110	0.000273	156	303	0.152
Toluene	0.000634	0.000833	0.000182	0.000063	0.000478	**0.002807**	0.000210	0.008826	0.000032	0.001535	0.000282	178	346	0.173
Total Aromatic Amines	0.000049	0.000351	0.001275	0.000021	0.000096	**0.002339**	0.000081	0.000364	0.003032	0.000037	0.000094	148	289	0.144
Total C2 to C5 Aldehydes	0.003070	0.000219	0.000273	0.000063	0.000766	**0.000585**	0.000243	0.017004	0.000158	0.002156	0.001316	37.1	72.2	0.0361
Total HAPs	0.016174	0.012355	0.004318	0.001076	0.004574	**0.026222**	0.004777	0.031842	0.007364	0.015939	0.003943	1662	3236	1.62

These emission calculations were reproduced from SSM 057-10672-00002, issued October 20, 1999.

*** Note: Substitute appropriate column letter in formula

Total State Potential Emissions

METHODOLOGY

Estimated Actual Emissions (tons/yr) = Annual Usage of Index (lbs/yr) * Emission Factor (lbs Chemical/lbs Index) * 1 ton/2000 lbs

Estimated Potential to Emit (tons/yr) = Estimated Actual Emissions (lbs/yr) x 8760/4500 (hr/yr yr/hr) x 1/2000 (ton/lb)

HAP Emission Calculations
Pouring-Cooling-Shakeout Binder Systems
for Grey Iron Foundries

Company Name: **Indiana Ductile, LLC**
Address City IN Zip: **1600 South 8th Street, Noblesville, IN 46060**
Permit #: **T057-13975-00002**
Reviewer: **ERG/BS**
Date: **April 22, 2002**

Annual Usage of Index Material (lbs/yr)	Binder System
1843200	Green Sand

	Binder System Type Emission Factors => Lbs. of Chemical Released to Air per Lbs. of Index											***		
Pollutant	Phenolic Nobake (Resin)	Phenolic Urethane (Resin)	Phenilic Hotbox (Resin)	**Green Sand (Seacoal)**	Core Oil (Core Oil)	Shell (Resin)	Low Nitrogen Furan (Resin)	Med Nitrogen Furan TSA Catalyst (Resin)	Furan Hotbox (Resin)	Alkyd Isocyanate (Resin & Isocyanate)	Sodium Sili-cate & Ester (Sugar & Ester)	Estimated Actual Emissions (lbs/yr)	Estimated Potential to Emit (lbs/yr)	Estimated Potential to Emit (tons/yr)
Ammonia	0.000039	0.000083	0.010931	**0.000065**	0.000038	0.003860	0.000040	0.000202	0.019579	0.000037	0.000038	120	233	0.117
Hydrogen Sulfide	0.001462	0.000057	0.000009	**0.000832**	0.000057	0.000094	0.000405	0.000486	0.000060	0.000007	0.000197	1534	2985	1.49
Nitrogen Oxides	0.000029	0.000044	0.000638	**0.000562**	0.000081	0.000994	0.000012	0.000312	0.000411	0.000355	0.000028	1036	2017	1.01
Sulfur Dioxide	0.015107	0.000061	0.000036	**0.000253**	0.000115	0.003509	0.000607	0.004858	0.000088	0.000040	0.000244	466	908	0.454
Total Hydrocarbons	0.012159	0.023377	0.005165	**0.011941**	0.028737	0.022421	0.007814	0.017178	0.006259	0.035567	0.022782	22010	42845	21.4
Acrolein	0.000005	0.000031	0.000009	**0.000002**	0.000077	0.000047	0.000028	0.000016	0.000013	0.000088	0.000028	3.69	7.18	0.00359
Benzene	0.011209	0.005351	0.001002	**0.000611**	0.002344	0.006667	0.000648	0.004534	0.000537	0.005336	0.001410	1126	2192	1.10
Formaldehyde	0.000010	0.000022	0.000006	**0.000004**	0.000096	0.000035	0.000267	0.000065	0.000009	0.000106	0.000169	7.37	14.4	0.00718
Hydrogen Cyanide	0.000029	0.001053	0.001184	**0.000118**	0.000086	0.010526	0.000368	0.000607	0.003474	0.000175	0.000179	217	423	0.212
M-Xylene	0.000097	0.000439	0.000121	**0.000021**	0.000239	0.000585	0.002227	0.000243	0.000032	0.002522	0.000094	38.7	75.4	0.0377
Naphthalene	0.000049	0.000022	0.000030	**0.000021**	0.000048	0.000058	0.000040	0.000040	0.000032	0.000037	0.000005	38.7	75.4	0.0377
O-Xylene	0.000049	0.000132	0.000030	**0.000021**	0.000287	0.000117	0.000729	0.000040	0.000032	0.003838	0.000094	38.7	75.4	0.0377
Phenol	0.000975	0.003904	0.000203	**0.000131**	0.000057	0.002456	0.000024	0.000101	0.000016	0.000110	0.000273	241	470	0.235
Toluene	0.000634	0.000833	0.000182	**0.000063**	0.000478	0.002807	0.000210	0.008826	0.000032	0.001535	0.000282	116	226	0.113
Total Aromatic Amines	0.000049	0.000351	0.001275	**0.000021**	0.000096	0.002339	0.000081	0.000364	0.003032	0.000037	0.000094	38.7	75.4	0.0377
Total C2 to C5 Aldehydes	0.003070	0.000219	0.000273	**0.000063**	0.000766	0.000585	0.000243	0.017004	0.000158	0.002156	0.001316	116	226	0.113
Total HAPs	0.016174	0.012355	0.004318	**0.001076**	0.004574	0.026222	0.004777	0.031842	0.007364	0.015939	0.003943	1983	3861	1.93

These emission calculations were reproduced from SSM 057-10672-00002, issued October 20, 1999.

*** Note: Substitute appropriate column letter in formula

Total State Potential Emissions

METHODOLOGY

Estimated Actual Emissions (tons/yr) = Annual Usage of Index (lbs/yr) * Emission Factor (lbs Chemical/lbs Index) * 1 ton/2000 lbs

Estimated Potential to Emit (tons/yr) = Estimated Actual Emissions (lbs/yr) x 8760/4500 (hr/yr yr/hr) x 1/2000 (ton/lb)

HAP Emission Calculations
Pouring-Cooling-Shakeout Binder Systems
for Grey Iron Foundries

Company Name: **Indiana Ductile, LLC**
Address City IN Zip: **1600 South 8th Street, Noblesville, IN 46060**
Permit #: **T057-13975-00002**
Reviewer: **ERG/BS**
Date: **April 22, 2002**

Individual Potential Binder Totals

Pollutant	Phenolic Urethane (tons/yr)	Shell (tons/yr)	Green Sand (tons/yr)	Total (tons/yr)	**Total HAPs (tons/yr)**
Ammonia	0.00184	0.238	0.117	0.357	not a HAP
Hydrogen Sulfide	0.00126	0.00580	1.49	1.50	not a HAP
Nitrogen Oxides	0.000976	0.0613	1.01	1.07	not a HAP
Sulfur Dioxide	0.00135	0.217	0.454	0.672	not a HAP
Total Hydrocarbons	0.519	1.38	21.4	23.3	not a HAP
Acrolein	0.000688	0.00290	0.00359	0.00718	0.00718
Benzene	0.119	0.411	1.10	1.63	1.63
Formaldehyde	0.000488	0.00216	0.00718	0.00982	0.00982
Hydrogen Cyanide	0.0234	0.650	0.212	0.885	0.885
M-Xylene	0.0097	0.0361	0.0377	0.0835	0.0835
Naphthalene	0.000488	0.00358	0.0377	0.0417	0.0417
O-Xylene	0.00293	0.00722	0.0377	0.0478	0.0478
Phenol	0.087	0.152	0.235	0.473	0.473
Toluene	0.018	0.173	0.113	0.305	0.305
Total Aromatic Amines	0.008	0.144	0.0377	0.190	not a HAP
Total C2 to C5 Aldehydes	0.005	0.0361	0.113	0.154	not a HAP
		Total HAP Potential to Emit from binder			**3.479**

Limited HAP Emissions from Catalyst Use from Core Manufacturing
The total VOC used (from binder and catalyst (100% TEA)) by the core manufacturing operations is limited to 6.1 tons per year. Therefore, less than 6.1 tons of HAPs will be emitted per year.

Appendix A: Emission Calculations
HAP Emissions

Company Name: Indiana Ductile, LLC
Plant Location: 1600 South 8th Street, Noblesville, IN 46060
Permit # T057-13975-00002
Permit Reviewer: ERG/BS
Date: April 22, 2002

Process:	Production Rate (tons metal/hr)	Pollutant	Ef (lb/ton produced)	Uncontrolled PTE (ton/yr)	Controlled PTE (ton/yr)	Controlled/Limited PTE (ton/yr)
Scrap and Charge	10.2	chromium	0.00023	0.01	-	0.00
Handling (EU-2)		cobalt	0.00002	0.00	-	0.00
SCC# 3-04-003-15	0% control	nickel	0.00040	0.02	-	0.01
AP-42 Ch. 12.10		arsenic	0.00008	0.00	-	0.00
		cadmium	0.00004	0.00	-	0.00
		selenium	0.00001	0.00	-	0.00
		Lead	0.00230	0.10	-	0.04

Process:	Production Rate (tons metal/hr)	Pollutant	Ef (lb/ton produced)	Uncontrolled PTE (ton/yr)	Controlled PTE (ton/yr)	Controlled/Limited PTE (ton/yr)
	10.2	chromium	0.00160	0.07	0.04	0.01
Pouring/Casting (EU-7, EU-8, EU-9)		cobalt	0.00013	0.01	0.00	0.00
SCC# 3-04-003-18		nickel	0.00281	0.13	0.06	0.03
	49% control	arsenic	0.00055	0.02	0.01	0.01
	wet collector	cadmium	0.00025	0.01	0.01	0.00
		selenium	0.00004	0.00	0.00	0.00
		Lead	0.01617	0.72	0.37	0.15

Process:	Production Rate (tons metal/hr)	Pollutant	Ef (lb/ton produced)	Uncontrolled PTE (ton/yr)	Controlled PTE (ton/yr)	Controlled/Limited PTE (ton/yr)
	10.2	chromium	0.00122	0.05	0.01	0.00
Castings Shakeout (EU-11, EU-12, EU-13)		cobalt	0.00010	0.00	0.00	0.00
SCC# 3-04-003-31		nickel	0.00214	0.10	0.01	0.00
AP-42 Ch. 12.10	88.2% control	arsenic	0.00042	0.02	0.00	0.00
	wet collector	cadmium	0.00019	0.01	0.00	0.00
		selenium	0.00003	0.00	0.00	0.00
		Lead	0.01232	0.55	0.06	0.03

Process:	Production Rate (tons metal/hr)	Pollutant	Ef (lb/ton produced)	Uncontrolled PTE (ton/yr)	Controlled PTE (ton/yr)	Controlled/Limited PTE (ton/yr)
	10.2	chromium	0.00646	0.29	0.01	0.00
Castings Cleaning and Finishing		cobalt	0.00051	0.02	0.00	0.00
(EU-30, EU-31, EU-32, EU-33)		nickel	0.01139	0.51	0.02	0.01
SCC# 3-04-003-40	97% control	arsenic	0.00221	0.10	0.00	0.00
AP-42 Ch. 12.10	baghouses	cadmium	0.00102	0.05	0.00	0.00
		selenium	0.00017	0.01	0.00	0.00
		Lead	0.00450	0.20	0.01	0.00

TOTALS	Pollutant	Uncontrolled PTE (ton/yr)	Controlled PTE (ton/yr)	Controlled/Limited PTE (ton/yr)
	chromium	0.42	0.05	0.02
	cobalt	0.03	0.00	0.00
	nickel	0.75	0.09	0.04
	arsenic	0.15	0.02	0.01
	cadmium	0.07	0.01	0.00
	selenium	0.01	0.00	0.00
	Lead	1.58	0.44	0.22

The source is limited to 27,900 tons of metal throughput per year. The capacity of the plant is 89,352 tons per year. Therefore, the limited HAP PTE is equivalent to 31% (27,900/89,352) of the source's PTE (after controls where applicable).
HAP emissions from units EU-3A, EU-6, EU-7A, EU-7B, EU-7C, EU-16 through EU-20, and EU-22 through EU-27 are negligible.

Methodology:
Ef = Emission factor
Uncontrolled PTE = = Rate (units/hr) x Ef(lbs/unit) x 8760 hrs/yr / 2000 lbs/hr
Controlled PTE = (1-efficiency/100) x Uncontrolled PTE
1 lb = 2000 tons